ARLINGHAUS, EDWARD JAMES

A POLITICAL SCIENCE PARADIGM AS A BASIS FOR A HEALTH PROMOTION MODEL

University of Cincinnati PH.D. 1981

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A POLITICAL SCIENCE PARADIGM
AS A BASIS FOR
A HEALTH PROMOTION MODEL

A dissertation submitted to the

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by

Edward J. Arlinghaus

B.B.A., University of Cincinnati, 1948

M.B.A., Xavier University, 1958

M.Ed., Xavier University, 1971

M.S., Xavier University, 1973

UNIVERSITY OF CINCINNATI

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I hereby recommend that the thesis prepared under my supervision by Edward J. Arlinghaus

entitled A Political Science Paradigm As A Basis For A Health Promotion Model

be accepted as fulfilling this part of the requirements for the degree of Doctor of Philosophy

Approved by:

Edmund R. Padgett

Mary E. Wheeler

Martin D. Strauss

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TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

CHAPTER I

INTRODUCTION

The purpose of this dissertation is to examine the sickness/wellness health care models in the American society.

The promotion of Wellness as a health care model using a political campaign paradigm will be tested.

THE PROCESS OF HEALING

Since the beginning of recorded time, healing has been a combination of mind, body and spirit working together. In the western world "The Holy Bible" provides incident after incident which makes this point clear. In the book of Genesis, chapter 2:7 the Old Testament writer portrays the creation of man. The act of uniting the breath of Yahweh and the dust of the earth to produce a living person indicates the psycho-physical unity of this creature. Psalms 29:1-12 speak of the deliverance from death through prayer and indulgence. Psalms 106:17-22 describes the healing Lord. These are just a few of many citations.

Similarly in the New Testament the healing ministry of Jesus Christ never separated body from soul. (At this point it is significant to note that there were many great healers in the western world and it is not very useful to

compare them since each had a unique contribution to make at a particular time in history. However, in religious history, Jesus Christ has been more dominant in shaping religious and cultural beliefs and values in the western world than all other religious figures.) His ministry of healing makes Him a particularly good example of whole person health care. A good illustration of the healing ministry of Jesus is the description of the healing of the paralytic. The man is obviously brought to Jesus for healing, but Jesus tells the man that his sins are forgiven. This upsets the Pharisees because only God can forgive sins.

In response to them, Jesus says, "For which is easier, to say, 'Thy sins are forgiven thee', or to say 'Arise, and walk'? But that you may know that the Son of Man has power on earth to forgive sins" - then he said to the paralytic - "Arise, take up thy pallet and go to thy house." And he arose, and went away to his house. (Matthew 9:5-7)

For Jesus, forgiving (spiritual) and healing (physical) were interchangeable, He did not differentiate between the two. This is confusing to us only because of the sharp differentiations we make between the two. The Greek word "sodzo" literally means "save." However in fully one third of its usage in the Gospels it translates into "to heal."

The mind, body and spirit concept of healing prevailed in the era before Christ (B.C.), however, a radical new

departure for an understanding of disease and healing belongs to the Greeks. Their curiosity and belief in the universe as a rational system based on discoverable laws, resulted in developing a system of medicine based on scientific observation and classification of facts. Hippocrates (born 460 B.C.) is the father of scientific medicine. He claimed that every kind of illness was subject to natural laws.

According to demonic theory, disease is due to external causes, such as the invasion of the body by an evil spirit. In the Hippocratic view disease is the symptom of internal disharmony. As a result of this inquiry and study the first school of medicine was created in Athens. This school of medicine established its practice on healing and curing based on physical science. The Christian church opposed this form of healing because it did not include the spiritual element, i.e., God.

The opposition and influence of the church was seen in Emperor Justinian I's closing of the medical schools of Athens and Alexandria in the 6th Century.

A succession of Papal edicts in the eleventh, twelfth and thirteenth centuries forbade the study and practices of medicine and surgery by the clergy.

In 1248 A.D. the dissection of human bodies was pronounced sacrilegious, as such the study of anatomy was effectively prevented.

The hostility of church men to the independent investigations of Copernicus, Galileo, Harvey, and Kepler are well known.[1]

Throughout the centuries the separation of mind, body and spirit in the healing process has developed to the point that today, three distinct systems exist. The mental health system, the physical health system and the religious system which addresses spiritual health. Although they may collaborate in addressing a person's health it is not a unified system where the patient is assessed as a whole person.

This situation reached a zenith in the United States after World War II. Four major phenomena occurred:

1. Superspecialities were created in the fields of Medicine and Surgery.[2]
2. Medical technology advanced dramatically providing the physician with healing potential never before imagined prior to World War II.[3]
3. The hospital became the center for life saving and health restoration activities of physicians. The expansion in the number of hospital beds in the United States was uncontrolled and dramatic.[4]

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[1]Verne H. Booth, Physical Science - A Study of Matter and Energy, The Macmillan Company, New York, 1964, pp. 45-53.

[2]Ruth M. French, Dynamics of Health Care, McGraw-Hill Book Company, New York, 1979, p. 11.

[3]Ibid, p. 61.

[4]Ibid, p. 61.

4. The state of the art in the treatment of patients was updated based on a new knowledge of contemporary physiology of man learned in the war.[1]

The result of these developments was a significant abdication of personal responsibility for health by the individual and almost complete reliance on the physician. This attitude by many Americans coupled with the promotion of non-nutritious foods, easy living, disregard for pollution of the environment and stressful lifestyles created the sickness health care model of the 1950's, '60's and '70's. The notion of living an irresponsible life from a health perspective was rational because the physician could "heal."

As this national attitude enters the 1980's, high incidence of killer diseases, excessive use of drugs and alcohol, pollution of the environment, pending scarcity of many resources, the spiraling cost of sickness has caused a serious assessment of change in lifestyle and wellness as a purposeful goal in life.

Health education has not been popular and only marginally effective because the average American does not appear to want to assume responsibility for his own health and examine his lifestyle in light of statistics which indicate

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[1]R. M. Sloane, B. L. Sloane, A Guide to Health Facilities - Personnel and Management, The C. V. Mosley Company, St. Louis, pp. 14-16.

the need for change. Not only public health statistics regarding heart, cancer, stroke and other prevalent diseases but sales of tobacco, liquor, drugs coupled with pollution of water, air and ground confirm man's willingness to accept lifestyles which are not healthy.

The balance of this dissertation will submit the notion that there will be a shift from dependence on the physician to self-responsibility for wellness in the next decade. This will mean a shift from the "sickness" health care model of the past three decades to a "wellness" health care model in the 1980's. Significant in this notion is the emergence of health promotion as an aggressive thrust to bring about change in lifestyle. It is envisioned that health promotion coupled with health education will bring about a wholistic concept of self-responsibility for wellness which will involve the mind, body, and spirit and some dependence on physicians trained in the wellness or wholistic concept.

CHAPTER II

STATEMENT OF HYPOTHESIS

The hypothesis of this dissertation is that health lifestyle can be effectively promoted by using the political election campaign paradigm.

Changing lifestyles of Americans to improve health has been a constant effort in our society. Public as well as private agencies and organizations have persevered in what appears at times to be a thankless and fruitless crusade. Public health clinics and health education programs do not appear to reach the majority of the population. In the private sector Alcoholics Anonymous, Weight Watchers, Smoking Cessation clinics reach a small part of the population and focuses on curative rather than preventive measures.

A review of current literature reveals that a valuable avenue for influencing behavior in health matters has not been utilized; i.e. the community "opinion leaders." It is the hypothesis of this writer that if the opinion leaders in a community were to commit themselves to change lifestyles of their constituencies there could be real and positive change in the lifestyles of the constituents. Taking the hypothesis one step further, if the opinion leaders worked in concert within a calculated and deliberate health promotion campaign, the impact on the total community could be dramatic.

To gain perspective on this hypothesis one might draw the analogy of a political election campaign.

- The functions of the opinion leader in the hypothesis and a ward chairman in a precinct appear comparable.
- The constituency in the hypothesis and a precinct appear comparable.
- The shaping of attitudes on issues in the hypothesis and the precinct appear comparable.
- The campaign promotion "to act" is similar in both situations. In the hypothesis the promotion is to modify existing behavior. In the political election campaign the promotion is "to vote" and to vote in a specific manner. In both cases the final measurement is the degree of response to the promotion.

Therefore it is the hypothesis of this writer that a health promotion campaign patterned on a political election campaign could be effective in modifying lifestyles of citizens of a community to adopt healthier habits.

In this document the writer will test this hypothesis.

CHAPTER III

REVIEW OF THE LITERATURE

INTRODUCTION

A review of the literature on Health Promotion produced a very sketchy and fragmented resource of enlightened writings. Until 1980, the terms Health Education and Health Promotion were used synonymously. In 1980 definitions were submitted by the office of Health Information, Health Promotion and Physical Fitness and Sports Medicine, Washington, D.C. These definitions have been publicized for professional reaction as of June, 1980.

To gain an appreciation of Health Promotion one needs to examine and assess Health Education. Health Promotion as the definition states is "a combination of health education and related political, economic and organizational interventions." Therefore, this literature review examines various aspects of health education and expands on the concept of achieving health behavior-change by the use of several modalities.

This review is organized as follows:

A. HEALTH EDUCATION/HEALTH PROMOTION

B. THE SCOPE OF HEALTH EDUCATION

C. HEALTH BEHAVIOR-CHANGE MODELS

A. HEALTH EDUCATION/HEALTH PROMOTION

An intensive review of literature prior to 1980 finds the terms Health Education and Health Promotion used interchangeably and synonymously. In her recent book, Anne R. Somers,[1] differentiated between health education and health promotion in "Recommendation 1 - Health Promotion"[2] and "Recommendation 2 - Consumer Health Education."[3] Although she stated they are not synonymous[4] she does not capture the difference in thrust of effort and specificity of behavior modification. In the Surgeon General's Report on Health Promotion and Disease Prevention, "Healthy People"[5] - Chapter 10 (pages 119 to 135) identify health promotion activities and programs without really defining or describing the process. These are just two examples where health education and health promotion are singled out as different processes but not separated by a definitional concept.

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[1]Anne R. Somers, Promotion Health-Consumer Education and National Policy, Aspen Publications, Germantown, Maryland, 1976.

[2]Ibid., p. 79.

[3]Ibid., p. 80.

[4]Ibid., p. 78.

[5]Healthy People: The Surgeon General's Report on Health Promotion and Disease-Background Papers, 1979. U.S. Department of Health Education and Welfare-Forward Plan for Health 1977-81. (PHS) Publication No. 79-55071, 1979.

The only definitive separation of Health Education and Health Promotion appears to be one publicized in "Focal Points" a publication of the Bureau of Health Education, June 1980.

Health Education[1] - Any combination of learning opportunities designed to facilitate voluntary adaptations of behavior (in individuals, groups, or committees) conducive to health.

Health Promotion[1] - Any combination of health education and related political, economic and organizational interventions designed to facilitate behavioral and environmental adaptations that will improve or protect health.

Significant in these definitions is the difference in originator thrust and audience impact.

Health Education is a "combination of learning opportunities" whereas Health Promotion is a "combination of health education and related interventions," i.e. political, economic, organizational. Health education facilitates voluntary adaptations of behavior; health promotion facilitates behavioral and environmental adaptations. In essence, one provides information, the other provides persuasion on issues.

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[1]Focal Points, Definitions proposed by Office of Health Information, Health Promotion and Physical Fitness and Sports Medicine," Hubert Humphrey Building, 200 Independence Avenue, S.W., Room 721-3, Washington, D.C. 20201. Publication of the Bureau of Health Education, June 1980.

B. THE SCOPE OF HEALTH EDUCATION

Health education is defined as "any combination of learning opportunities designed to facilitate voluntary adaptations of behavior (in individuals, groups, or committees) conducive to health." The various labels used for health education programs and activities--

- motivation programs
- behavior modification programs
- health counseling programs
- and communications;

illustrate the scope, diversity and boundaries of educational applications in health.[1]

Motivational program strategies qualify as means of health education as long as motives are not aroused to the point at which behavior is compelled. At that point the condition of voluntary change has been violated. Motivation programs are usually combined with incentive schemes designed to appeal to economic motives.[2] Motivation programs have been used especially in family planning activities.[3]

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[1] L. W. Green, W. K. Marshall, S. G. Deeds and K. B. Partridge, Health Education Planning: A Diagnostic Approach, Mayfield Publishing Company, Palo Alto, California, 1980.

[2] Ibid., p. 7.

[3] S. C. Deeds, A Guidebook for Family Planning, U.S. Government, Department of Health, Education and Welfare Publication No. (HSA) 74-160021, Bureau of Community Services, 1973.

Behavior modification was exclusively a clinical psychology concept at one time. However in recent years the idea has found appealing and effective application in other disciplines. Behavior modification techniques qualify as health educational methods as long as subjects voluntarily submit to them to achieve changes they desire in their own behavior.[1] An editorial in the American Journal of Public Health states this aspect succinctly--"Health workers agree generally that we are now in a period when the human factor must be taken into account if public health is to handle its problems successfully. Many of the areas of health with which public health is today concerned involve individual voluntary action on the part of many people."[2]

Counseling in the psychotherapy sense is outside the realm of health counseling. To the degree that emotional disturbance interferes with voluntary control of behavior, counseling is psychotherapeutic rather than educational. Activities associated with health counseling are: genetic counseling, diet counseling, patient counseling, etc.

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[1]M. J. Mahoney, Cognitive Behavior Modification, Balinger Publishing Co., New York, 1977.

[2]"Editorial," American Journal of Public Health, 49, 536 (1959).

Counseling activities are within the realm of health education insofar as they represent an approach to voluntary change in health behavior.[1]

Communications are used to affect behavior in every sphere of human endeavor. Communication is essential to social change.[2] Their use in relation to health behavior is usually within the scope of health education programming,[3] except when they are used to advertise or promote products or causes inconsistent with the health needs of consumers.[4] Social scientists, political scientists, marketing and consumer researchers, business administrators are all interested and involved in communications. The multidisciplinary and inter-disciplinary backgrounds of the communication field present a whole new panoply of rigorous scientific methods for obtaining health behavior changes in a desired direction in relatively large populations.

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[1] L. W. Green et al., Health Education Planning: A Diagnostic Approach, p. 8.

[2] E. M. Rogers, Communication of Innovations: A Cross Cultural Approach, The Free Press, New York, 1971, p. 6.

[3] P. R. Miro and H. S. Ross, Health Education and Behavioral Science, Oakland: Third Party, California, 1975.

[4] L. W. Green, Should Health Education Abandon Attitude Change Strategies?, Perspectives from Recent Research, Health Education Monographs, No. 30, pp. 25-48, Society of Public Health Educators, 1970.

Other forms and methods of health education that defines its scope are community organizations, inservice training, consultation, group work, computer-assisted training, non-computerized teaching machines and audiovisual methods, patient teaching, health fairs exhibits, libraries, conferences and routine health provider-consumer interactions. The scope of health education is defined as much, however, by its expected outcomes as by its methods and forms.[1]

Health Education National-International

The United States spends more on health in absolute terms and as a percent of the gross national product (GNP) than any other nation in the world.[2] From 12.7 billion or 4.5% of GNP ($81.86 per capita) in 1950, to 192.4 billion or 9.1% of GNP ($863.01 per capita) in 1978.[3] During the 1970's national health expenditures have more than doubled with an average annual increase of 12.6%. In 1978 the trend of rapidly rising health expenditures continued with an annual increase of 13.2%.[4] (Much of this increase is due to

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[1] L. W. Green et al., Health Education Planning: A Diagnostic Approach, p. 9.

[2] J. B. Knowles, "The Responsibility of the Individual," Daedalus, 106:1, 57-80, Winter, 1977, p. 65.

[3] R. M. Gibson, National Health Expenditures - 1978, Health Care Financial Review 1 (1): 1-36, 1979.

[4] L. Breslow et al., Annual Review of Public Health, Volume 1, 1980, Annual Review Inc., Palo Alto, California, 1980, p. 32.

inflation. In constant dollars the 1978 expenditures were only 2.6 times the level for 1950.)[1] Per capita personal health care expenditures for 1978 were 10.7 times the level for 1950, an increase from $70.37 to $752.98 per person. (Inflation! In constant dollars 1978 expenditures only 2.6 times the level for 1950.)[2]

Although most would agree that preventing a disease is preferable to treating it later, we observe that the vast majority of the health dollars are spent on acute medical care. In fact less than 2.5 percent of the total annual national expenditure is spent on disease prevention and control measures. Only 0.5 percent for health education and 0.5 percent for improving the organization and delivery of health services.[3]

Another important and interesting aspect of the Health Education of the future is the demographic distribution of the population. "The population of the United States is aging. A quarter of a century ago, 8% of the country's 152 million people were 65 years of age and over; now close to 11% or 23 million are aged 65 and over. This latter age group is the most rapidly growing population group. Based

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[1]L. Breslow, Annual Review of Public Health 1980, p. 32.

[2]Ibid., p. 32.

[3]J. B. Knowles, The Responsibility of the Individual, p. 65.

on various population projections, with each projection assuming different rates of mortality decline, an estimated 11 to 13% of the population, or 32 million people, will be 65 years of age and over in the year 2000. Within that age group the population over age 75 will grow most rapidly. By 2000, an estimated 14 million people will be at least 75 years of age, 62% more than in 1977."[1] Complementing these facts and projections is the finding that a macro-perspective of successful disease prevention programs reveals huge financial outlays associated with maintaining an aging population.[2]

What does this mean? Older people will make more demands on the health care system. Their demands will dramatically influence the kinds and placement of services for health. Also health education will have an expanding and increasingly interested audience. A survey[3] reported that reading about health in newspapers and other communication media as well as interest in health items in general increases with age.

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[1] L. Breslow, Annual Review of Public Health 1980, p.4.

[2] G. B. Gori and B. J. Richter,"Macroeconomics of Disease Prevention in the United States", Science, 200: 1124-1130, June 9, 1978.

[3] The Public Impact of Science in Mass Media, A report on a nationwide survey for the National Association of Science Writers, Survey Research Center, Michigan, 1958.

National Insights

Prior to the 1970's there seemed to be more sentiment and rhetoric than positive action and support for health education. The Health Maintenance Organization Act (1973) specified that preventive and educational services were mandatory for health maintenance organizations receiving certification.[1] In 1973, the Presidents Committee on Health Education advocated establishment of a Bureau of Health Education in the Department of Health, Education and Welfare and, in the private sector, a National Center for Health Education. Both are active as national focal points.[2]

The National Health Planning and Resource Development Act (1974) specified public health education as one of the health priorities of the nation.[3]

Following extensive hearings before the Senate Subcommittee on Health (of the Committee on Labor and Public Welfare) during 1975, a new National Health Information and Health Promotion Act, Public Law 94-317 (1976) was enacted.[4]

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[1] M. Mueller,"HMO Act of 1973, Social Security Administration, Office of Research and Statistics, Note No. 5," 1974, Medical Care Review, April, 1974, p. 704.

[2] L. W. Green et al., Health Education Planning: A Diagnostic Approach, p. 2.

[3] Focal Points,"U.S. Department of Health, Education and Welfare, Bureau of Health Education,"July 1977.

[4] "Public Welfare,"U.S. Senate, 94th Congress (U.S. Government Printing Office, 1975), p. 1306.

This established an office of Health Information and Health Promotion under the assistant Secretary of Health in the Department of Health, Education and Welfare.[1]

In 1978, the Bureau of Health Manpower sponsored a national gathering of health educators for the purpose of establishing criteria for possible use in the certification of health educators.[2]

In 1979, the "Forward Plan for Health-FY 1977-1981" the U.S. Surgeon General's Report on Health Promotion and Disease stated "the greatest benefits are likely to accrue from efforts to improve the health habits of all Americans and the environment in which they live and work."[3] Clearly the effects of lifestyle on health is being recognized.[3]

Today in the United States, there is one health educator for every 17,000 people, while there is one physician for every 650 and one nurse for every 280 people.[4]

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[1] Focal Points,"U. S. Department of Health, Education and Welfare, Bureau of Health Education,"September, 1976.

[2] L. W. Green et al., Health Education Planning: A Diagnostic Approach, p. 3.

[3] Healthy People: The Surgeon General's Report on Health Promotion and Disease-Background Papers, 1979. U.S. Department of Health Education and Welfare-Forward Plan for Health 1977-81. (PHS) Publication No. 79-55071, 1979.

[4] Knowles, "The Responsibility of the Individual," p. 76.

Foreign Insights

Perhaps the most widely known example of the life-style approach to health is Canada's "Operation Lifestyle." This is an example of an entire nations commitment to prevention and health education.[1]

Mark Lalonde, the former Canadian Minister of National Health and Welfare, describes the approach in his report titled "A New Perspective on the Health of Canadians."[2]

In an interesting attempt to broaden the theoretical and practical basis of Public Health in Canada, Lalonde proposed that the health field be broken up into four broad elements: human biology, environment, lifestyle and health care organization.

Health Education in Europe, a report published in 1976, provides an overview of health education policies, trends, and practices in twenty-eight countries. In summary the report Schnochs states "everywhere in Europe today, health education is perceived as an integral dimension of health care and an essential prerequisite to effective legislative action aimed at protecting people from health hazards. It is also recognized that modern health policy

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[1]L. W. Green, Health Education Planning: A Diagnostic Approach, p. 3.

[2]M. Lalonde, A New Perspective on the Health of Canadians, A Working Document, Ottawa: Government of Canada, 1974.

calls for educational interventions which have a sound scientific foundation."[1]

Several interesting examples of health education innovations are cited in the report, including a comprehensive cardio-vascular disease program in North Karelia, Finland and a twenty-five year prospective study in Sweden designed to curb smoking by means of selected social influences.[2]

D. N. Loransky, Director of the USSR's Central Institute for Scientific Research in Health Education explains that the Presidium of the Academy of Medical Sciences of the USSR identified health education as a factor of national significance and established a special health education problem commission in 1976, calling it a decision that "heralds a new and important period in the development of health education in the country, from now on, all the medical departments and institutes located in the various republics and regions will participate in educational activities on a regular and planned basis."[3]

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[1]H. Schnochs, "Forward," Health Education in Europe, 2nd ed., eds. A. Kaplan & R. Erben (Geneva: International Journal of Health Education, 1976) p.v.

[2]L. W. Green, Health Education Planning: A Diagnostic Approach, p. 4.

[3]Schnochs, Health Education in Europe, p. 209.

C. HEALTH BEHAVIOR CHANGE MODELS

As the eminent economist Victor Fuchs remarks in closing his book, "The greatest potential for improving health lies in what we do and don't do for and to ourselves. The choice is ours."[1] Health education and health promotion are the avenues for changing lifestyles. "Changing human behavior involves sustaining and repeating an intelligible message, reinforcing it through peer pressure and approval, and establishing clearly perceived rewards which materialize in as short a time as possible."[2]

These problems demand, for their solution and participation, integration of the disciplines of the biological sciences, the behavioral and social sciences (social, psychology, economics, cultural anthropology, political science), and public health (epidemiology and biostatistics).[3]

What are some of the models which have been designed to promote healthy lifestyle? Seven significant models appear to be relevant in designing an effective health promotion model.

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[1] V. R. Fuchs, Who Shall Live? Health Economics and Social Choice, Basic Books, New York, 1974.

[2] Knowles, "The Responsibility of the Individual," p. 60.

[3] Ibid., p. 65.

They are:

1. The Epidemiological Model - E. A. Suchman
2. The Opinion Leadership Model - P. F. Lazarsfeld
3. The "Fear" Model - I. M. Rosenstock
4. The Internal/External Factors Model - L. W. Green
5. The "Lifegain" Model - R. F. Allen
6. The Political Model - E. Ubell
7. The Health Promotion Model - L. W. Green et al

The Epidemiological Model

The late Edward A. Suchman provided a model for disease control through behavior change that points the way to the selection of the behavior modification technique. He called it the epidemiological model of health behavior change.[1] In epidemiology we view the courses of disease in terms of three major groups of factors:

(1) The host factors, which include all those characteristics present in the human individual that increase or decrease his chances of contracting the disease:

(2) the environmental factors, which surround the individual and which deter or aid the development of the disease: and

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[1]E. A. Suchman, "Preventive Health Behavior: A Model for Research on Community Health Campaigns," Journal on Health and Social Behavior 8, 197 (1967).

(3) the agent factors present in the disease-causing object or process itself, which determine its ability to produce the disease state.

Mr. Suchman goes on to point out that the host factors which had always been considered biological or psychological now include social and behavioral characteristics of the individual. The act of smoking cigarettes-a behavior-is as much a factor in the cause of lung cancer as is the host's biological susceptibility to the carcinogen. Similarily, the environment, which has almost always been considered physical-dirty water, poor housing, etc.- now includes the social milieu. For example, recent evidence suggests that problem drinking may be more a product of social environment than individual host factors.[1]

Seen in this light, the behavior to be changed must bear a direct epidemiological relationship to the disease that one wishes to bring under control or to reduce. In general, behaviors that bring patients to treatment have limited value.

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[1]E. A. Suchman, Sociology and the Field of Public Health, Russell Sage Foundation, New York, 1963.

The Opinion Leadership Model

As with the epidemiological model, Lazarsfeld[1] points out three factors which affect the actions of individuals:

(1) internal tendencies of the individual that predispose him toward or away from the specific behavior;

(2) external influences in the environment that favor or oppose the behavior; and

(3) the inherent attributes of the action itself or its goal that makes it attractive or unattractive to the individual.

Quoting on the Lazarsfeld model Suchman[2] states that internal tendencies include attitudes and beliefs of the individual.

External influences are changes in behavior which lead to changes in attitude. The surrounding social milieu is a powerful influence on behavior. A smoker refrains from smoking in the room of his sick friend. A potential employee submits to a physical exam because it is required for the employment.

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[1]P. F. Lazarsfeld and H. Menzel, "Mass Media and Personal Influence," in Wilbur Schramm (ed.), The Science of Human Communication, Basic Books, New York, 1963.

[2]E. A. Suchman, Sociology and the Field of Public Health, Russell Sage Foundation, New York, 1963.

Inherent attributes of a behavior which makes it attractive or unattractive deals with whether the desired behavior is too difficult or expensive to carry out. For example, it does little good to encourage use of seat belts if they are difficult to use.

The concept of opinion leadership was originally labeled by Lazarsfeld in 1940 as part of the two-step flow model, which hypothesized that communication messages flow from a source, via mass media channels, to opinion leaders, who in turn pass them on to followers. The exact number of steps in the process depends on the intent of the source, the availability of mass media and the extent of audience exposure, the nature of the message, and the message's salience to the receiving audience. Homophily is the degree which pairs of individuals who interact are similar in certain attributes, such as beliefs, values, education and social status. Heterophily is the degree to which pairs of individuals who interact are different in certain attributes.

Opinion leaders conform more closely to a system's norms than do their followers. When the system's norms favor change, opinion leaders are more innovative; but when the norms are more traditional, leaders are not especially innovative.[1]

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[1]E. M. Rogers and F. F. Shoemaker, Communication of Innovations--A Cross-Cultural Approach, The Free Press, New York, 1971.

The Fear Model

The American Cancer Society's cancer danger signals and the anti-venereal disease programs have stressed symptoms of illness. Such approaches have frightened individuals into going for therapy. The theoretical basis for such an approach has been given by Rosenstock who suggests that there are five components to health behavior change.

(1) The individual believes himself susceptible.

(2) The disease in question is serious.

(3) By changing his behavior, the individual will benefit and moreover he perceived that he will benefit.

(4) He does not perceive barriers to carrying out his behavior change, e.g., he will not spend too much money.

(5) He experiences a cue or trigger to undertake that behavior change.[1]

For the most part this model has not been successful. Examples are: cancer--once the symptom is discovered science has not, for the most part, been able to reverse the disease. Also, venereal disease--it has bordered on epidemic proportions over the past two decades.

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[1]I. M. Rosenstock, Why People Use Health Services in Poverty and Health, Harvard University Press, Cambridge, Massachusetts, 1969.

The Internal/External Factors Model

As has been pointed out many times, behavior change in relation to health practice depends on many factors. L. W. Green makes a distinction between internal and external forces, the former being the psychological attitudes and the latter the institutional and social arrangements within which the individual finds himself or seeks to put himself.[1] The retail industry has long recognized that rational expositions of the merits of the product have minimal utility in making sales. Great effort is expended in making emotional appeals that will affect attitude and belief (the internal factors) and arranging points of the sale in ways that will induce buying (the external factors).[2]

The Life Gain Model

The Life Gain Model has two major underlying hypothesis.

(1) That the group, organizations, families and communities to which we belong are cultures, and that these cultures which we create currently encourage and support negative health practices;

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[1]L. W. Green, Should Health Education Abandon Attitude Change Strategies?, Health Education Monographs No. 30, Society of Public Health Educators, 1968.

[2]Earl Ubell, "Health Behavior Change: A Political Model," Preventive Medicine 1, 209-221 (1972).

(2) That people can and will change these cultures when they are given an opportunity and the necessary assistance to do so, and that they can and will create in their place cultures which encourage positive health practices.[1]

Dr. Allen goes on to describe six interreleated steps within the framework of these hypothesis. They are:

(1) Obtain the commitment of leaders.

Whether it is the corporate president or the school principal, the unqualified support of leadership is essential.

(2) Invite the participation of volunteer leaders from the organization.

This provides people within the group with an opportunity to plan that change and work with their co-workers in implementing it.

(3) Conduct an analysis of the group's health culture and tailor the program to the special needs of the group.

To function effectively, the group needs to know what currently exists and what elements of the program are going to be the most

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[1]R. F. Allen, "Changing Lifestyles Through Changing Organizational Cultures," Proceedings of the 14th Annual Meeting of the Society of Prospective Medicine, St. Petersburg, Florida, 1978.

effective in bringing about change. From this analysis, it also needs to begin to prepare a supportive environment for the program introduction which is to follow.

(4) Introduce the program to all members of the group.

A high involvement workshop has been designed for that purpose which helps people develop supportive relationships with one another, while at the same time setting goals for themselves and beginning the process of change.

(5) Implement the change programs.

Through a combined effort of individual behavioral change and group cultural change, the program is implemented and culture change is effected. Families and community members are often invited to become involved in the change process.

(6) At periodic intervals evaluate the efforts of the program, the results that are being obtained, and what steps should be taken to renew the elements being used.

This, in effect, reinstitutes the process on a continuing basis.[1]

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[1]R. F. Allen, "Changing Lifestyles Through Changing Organizational Cultures, 1978."

Essentially what Dr. Allen is saying is that when people come together, over time they form a culture. That culture becomes a major influence over their lives. He also feels that culture norms which develop and exist are choices rather than requirements. The six step model is a change process dealing with internal choices of the individual rather than external pressures.[1]

The Political Model

Mr. Ubell proposes the idea that the candidate for political office who attempts to induce populations to vote for him has the same behavior change problems as the public health worker who seeks to change individual behavior for health purposes.[2]

He goes into detail in describing the political campaign and drawing an analogy with the behavior change efforts of health workers. The points he identifies are:

(1) The health workers advantage of not having to expect a counter campaign effort.

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[1]R. F. Allen, "Changing Lifestyles Through Changing Organizational Cultures, 1978."

[2]Ubell, "Health Behavior Change: A Political Model." Preventive Medicine 1, 2150216.

(2) The necessity of the random sample survey:

1 - The "poll" to determine election potential,

2 - To test slogans and other materials,

3 - To determine the communication modality best suited to the group and messages to be delivered.

(3) The optimization of spending i.e. which communication channel will be most effective for the cost.

(4) The evaluation of the campaign. The actual "vote at the box" tells whether the attitude change program was effective.[1]

Mr. Ubell summarizes by stating "all of this has its lesson for the health behavior change specialist (notice my avoidance of the use of the concept of health educator). The health behavior program, however, must be more rigorous than a political campaign. The specialist must optimize his health behavior change program for reduction in mortality and morbidity. This implies preprogram measures of risk of the specific disease, susceptibility to behavior change by the modalities selected, and ongoing measures of changes in attitudes, behavior and mortality and morbidity. There are also difficult ethical-political choices. Three such

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[1]Ubell, "Health Behavior Change: A Political Model," pp. 217-219, Preventive Medicine 1, 1972.

standards come to mind: maximum number of lives saved per dollar invested, equal effort per person in the population, and finally equal opportunity for survival per person."[1] He concludes his treatment of the topic by stating "we can wait no longer to use the data, the instruments and the computers to change unhealthy behavior in our population. The random sample survey, optimization of allocation of funds, techniques of epidemiology to measure incidence and prevalence, the testing of messages, the knowledge of the efficiency of various communications modalities, measures of social organization, mathematical models to optimize allocation of funds--all are available. They should and must be used for health behavior change. Otherwise, just as the modern political candidate who fails to use the methods available to him decreases dramatically his chances of winning his office, so too, do we decrease our chances of making people more disease free and live longer better."[2]

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[1]Ubell, "Health Behavior Change: A Political Model," p. 219. Preventive Medicine 1, 1972.

[2]Ibid., p. 220

The Health Promotion Model

In a book published in 1980[1] the authors present a health promotion model which appears to capture the definition of "health education and related political, economic and organizational interventions." The steps in the process are as follows:

- Identify Target Area & Mission
- Identify Means of Access
- Identify Persons With Influential Base
- Information Assessment:
  (Assess Quality of Life
  Prioritize Health Problems)
- Secure Cooperation of Influential Persons
- Devise Plan With Influential Persons
- Set Strategy & Tactics
- Set Activities
- Plan Activities Into Key Events
- Begin Activities
- Implement Events
- Measure Levels of Achievement
- Continuous Process

This model is selected by the writer to develop the contract with the Political Science Paradigm described in Chapter VI.

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[1] L. W. Green et al., Health Education Planning: A Diagnostic Approach, pp. 2-16, 52-66.

Summary

It is suggested that the emphasis be placed not on health education as such but on health behavior change. Although the goal of the former is the latter, the concept of health education has all too often narrowed operations to informational programs alone. If one considers health behavior change as primary then it becomes clear that other modalities must be brought into play.

The central theme of this chapter centers on the notion that any behavior change program must include efforts to arrange the mechanical or environmental situation so that the individuals who are led to change their behavior can actually do so.

As such, health education is fundamental to Health Promotion. The informational plan must be part of the overall effort to change attitude, influence environmental change and ultimately change behavior.

CHAPTER IV

METHODOLOGY

The major theme of this document is to construct a health promotion model patterned on a political election campaign paradigm and to test its effectiveness based on empirical knowledge.

Chapter V will provide the differentiation between the sickness health care model and the wellness health care model. In this chapter the concept of "High Level Wellness" will be submitted as the contemporary design to be used as the goal for health achievement by citizens in the North American society.

Chapter VI will describe the "Health Promotion Model" patterned on a "Political Science Paradigm." To establish a mode for comparison "The Political Process" described by Charles O. Jones is used. The process of "systems" is critical at this reading.

The Political Process systems:

- Problem Review System
- Formulation System
- Legitimation System
- Application System
- Evaluation System
- Solution

are central in relating the activities of the political process, the political election campaign and the health promotion campaign. (See Exhibit I)

Significant in developing this diagram of systems and activities are the works of C. O. Jones, R. Agranoff, L. Green, M. Kreuter, A. Deeds, and K. Partridge.

Chapter VII will relate the events in establishing empirical knowledge about the effectiveness of employing a political campaign paradigm to mount a health promotion program. Brown County in the State of Ohio is the study site. The political process systems are used as the mode for describing the sequential events.

Chapter VIII analyzes and synthesizes the observations of the empirical data in relation to the hypothesis.

CHAPTER V

THE SICKNESS/WELLNESS HEALTH CONTINUUM

In the introduction of this dissertation the writer presented a brief history of healing as recorded in the western world from early recorded history to present day. The significant observation is the evolution of a healing process which initially addressed the whole person (mind, body, spirit) but then fragmented into three distinct healing processes: mental health, physical health, and spiritual health.

The tragedy of this history, as far as the United States is concerned, is the era of the 1950's, '60's and '70's when destructive lifestyles were promoted by manufacturers of cigarettes, alcohol, automobiles, suntan lotions, cereals, etc. Americans adopted these ideas and depended almost totally on the physician for health restoration.

Today, as the United States embarks upon a new era in the 1980's, the American citizen has before him the Sickness/Wellness continuum. High Level Wellness has been selected as the health promotion model for Americans to achieve. The political election campaign paradigm has been selected as the medium for the health promotion. The actual health care promotion will be discussed in more detail in following chapters.

The Sickness/Wellness continuum is very vividly and succinctly described in the following graphic:[1] (Also see Exhibit II)

Sickness							Wellness				
-10	-9	-7	-5	-3	-1	0	+1	+3	+5	+7	+10

To establish a conceptual appreciation of the above diagram the writer has taken the liberty to relate various states of sickness and various stages of wellness to the values on the scales.

On the sickness side:

- 1 - Self care for injuries or discomfort
- 3 - Intermediate care
- 5 - Acute care
- 7 - Intensive care
- 9 - Terminal care
- 10 - Premature death

(Please refer to "Glossary of Terms" on page 90 for definitions)

[1]Donald B. Ardell, "HLW and the HSA: A Health Planning Success Story," American Journal of Health Planning, July, 1978.

On the wellness side:

+ 1 - Self care to avoid discomfort

+ 3 - Preventive Practice

+ 5 - Wholistic Health Practice

+ 7 - Lifetime health monitoring program

+10 - Self-optimization (High Level Wellness)

For many Americans "good health" means "no pain," "0" on the scale.

The sickness portion of the continuum starts with "-1" when the individual administers his own discomforts. Acuity of sickness progresses through various stages and ends in -10 or premature death. Significant in this scale is the presence of a health provider, (i.e. a Physician, registered nurse, etc.) after -1. The number of actors in the sickness drama increase as the sickness becomes progressively worse. Conversely the individual relinquishes more self-responsibility and control over his state of health.

The wellness portion of the continuum starts with "+1" when the individual behaves in a manner which allows him to escape discomfort (i.e. eat when hungry, sleep at regular intervals, imbibe in moderation, etc.). The levels of wellness increase as the person appreciates in his sense of self-awareness and understanding. It ends in "+10" or self-optimization. Significant in this scale is the self-responsibility and control which the individual exercises over his state of health at his biological age. The

highest order of health is High Level Wellness when the individual commits his lifestyle to one of optimizing his total body, mind and spirit's potential. As such he exhibits an effective balance of:

- Nutritional Awareness
- Stress Management
- Environmental Sensitivity
- Physical Fitness

It is the writers belief that "-10" and "+10" are final and absolute stages which require removal from the world of reality. They are, each in their own right, states of complete conclusion of their respective evolutions.

Since the hypothesis of this paper is the promotion of high level wellness using a political election campaign paradigm, the writer will dwell on the significant and more novel stages of the wellness scale as a prelude to the health promotion campaign.

Preventive practice places its emphasis on the whole person (physical, mental, spiritual, and social) and offers new insights into what the individual can do to prevent disease as well as participate in the treatment process.

Wholistic Health Clinics provide an array of health assessment services to provide a health profile with which

the client, in consultation with the clinic staff, can fashion a program to improve his or her own state of health.[1]

Lifetime Health Monitoring Program is an innovative proposal for routine preventive health care developed by Lester Breslow, M.D., Dean, School of Public Health, University of California, Los Angeles and Anne R. Somers, Professor, Community Medicine and Family Medicine, College of Medicine and Dentistry of New Jersey, Rutgers Medical School. Dr. Breslow and Ms. Somers first described the LHMP in the New England Journal of Medicine[2] dividing the life span into ten periods, and identifying health goals for each age group. They then presented a general description of the professional services required to meet these goals and recommend criteria for specific preventive services for each period. This model could be the forerunner of establishing wellness indices in the future. These criteria ensure that each recommendation included in the program is both cost-effective and relevant to the age of the patient.

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[1]"Report of National Symposium on Wholistic Health Care." W. K. Kellogg Foundation & University of Illinois Medical Center, Chicago, September 16-17, 1977.

[2]L. Breslow and Anne R. Somers, "The Lifetime Health-Monitoring Program: A Practical Approach to Preventive Medicine," New England Journal of Medicine, 296:601, August, 1977.

The age groups identified are:

1 - Pregnancy/Prenatal
2 - Infancy
3 - Pre-School Child
4 - School Age Child
5 - Adolescence
6 - Adult Entry
7 - Young Adult Years
8 - Middle Adult Years
9 - Older Adult Years
10 - Old Age

High Level Wellness transcends all other wellness practices in that it is the adoption of a lifestyle that maximizes the potential of the whole person (body, mind, spirit, and social) at its present biological age. It is more than prevention of disease, it is a self-commitment on the part of the person to optimize her/his whole person.

The idea of health being attributed to lifestyle was the subject of a book entitled, High Level Wellness, written by Dr. Halbert Dunn in 1961.[1] In this book, Dr. Dunn defines wellness as "an integrated method of functioning which is oriented to maximizing the potential of which an individual is capable within the environment in which he is functioning." Dunn goes on to relate a wellness philosophy to

[1]H. L. Dunn, High Level Wellness, R. W. Beatty Company, Arlington, Virginia, 1961.

the individual, family and community. At the foundation of his work was the goal of "forward progress" of the individual toward his unique potentials focused on the integration of mind, body and spirit.[1]

Dr. John Travis, who is founder of Wellness Resource Center in Mill Valley, California, defines wellness as:

. A way of life--a lifestyle you design in order to achieve your highest potential for well being.

. It has four major dimensions: nutrition, physical awareness, stress reduction, and self-responsibility.

. It envolves your whole being--physical, emotional, mental and spiritual.

. It is recognizing that the only thing that is certain in this universe is change.[2]

Dr. Donald Ardell in his book, "High Level Wellness" defines wellness as "a lifestyle-focused approach which you design for the purpose of pursuing the highest level of health within your capability. A wellness lifestyle is dynamic or ever-changing as you evolve throughout life. It is an integrated lifestyle in that you incorporate some

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[1]Donald B. Ardell, High Level Wellness: An Alternative To Doctors, Drugs and Disease, Rodale Press, Emmaus, Pennsylvania, 1977, p. 284.

[2]John W. Travis, Wellness Workbook: A Guide to Attaining High Level Wellness, Wellness Resource Center, Mill Valley, California, 1977, p. 3.

approach or aspect of each wellness dimension (self-responsibility, nutritional awareness, stress management, physical fitness, and environmental sensitivity). Such a lifestyle will minimize your chances of becoming ill and vastly increase your prospects for well-being."[1]

Over the past ten years, more and more scientific and professional literature has promoted the concept of wellness.

Bob Hoke, a Navy scientist, wrote of "promotive medicine."[2] Dr. Henrik Blum, authority on health planning and author of the contempory text in the field has reviewed a myriad of "health-plus" definitions, concluding that most include a goal of "maximizing potential."[3]

In his book, "Medical Nemesis," Ivan Illich describes wellness as an "ability to adopt to changing environments, to growing up and to aging, to healing when damaged, to suffering, and to the peaceful expectations of death. Health is a task; success in the endeavor is a result of self-awareness, self-discipline, and one's inner resources.[4]

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[1]Donald B. Ardell, High Level Wellness, p. 65.

[2]B. Hoke, "Promotive Medicine and the Phenomenon of Health," Environmental Health, 16 February 1968, pp. 270-271.

[3]Henrik Blum, Health Planning, Human Sciences Press, 1974, p. 97.

[4]I. Illich, Medical Nemesis: The Expropriation of Health, Pantheon Books, New York, 1976, p. 273.

In all of these definitions, descriptions and references to wellness, the central theme is the focus on personal responsibility for good health--a proactive posture on the part of the individual. This is in contrast to the reactive posture of the sickness model, where the physician is reacting to the illness. Unfortunately, in the "sickness" model, (other than the rehabilitation stage) very little is done to change the lifestyle of the patient to maximize the potential of her/his person.

A report from HEW stated that further expansion of the nation's health care delivery system would produce "only marginal increases in the overall health status of the American people."[1] It further stated that "the greatest benefits are likely to accrue from efforts to improve the health habits of all Americans and the environment in which they live and work."[2]

What are the characteristics of the "Wellness" model? Dr. Swearingen, at the Colorado Health Institute, Denver, Colorado, has developed the "E^3" (E cubed) concept (Educate - Evaluate - Enhance). Robert Keck of New Wineskens, in Columbus, Ohio, has developed "Health Care Plus." (Physical, mental, spiritual, and social.)

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[1]U.S. Department of Health, Education & Welfare. "Forward Plan for Health - FY 1977-81," quoted in U.S. Department of Health, Education and Welfare, Healthy People: The Surgeon General's Report on Health Promotion and Disease Background Papers 1979, p. 425.

[2]Ibid., p. 425.

Dr. Donald Ardell's model has five characteristics, as mentioned earlier in this paper. His model evolved out of earlier works by Drs. Dunn and Travis. His dimensions of Wellness are:

. Self-Responsibility
. Nutritional Awareness
. Stress Management
. Environmental Sensitivity
. Physical Fitness

He hastens to point out that moderation and balance are essential. A physical fitness "buff" might design a super program for physical fitness, but if he is not aware of nutrition (i.e. over-eat or not eat properly), he can compromise the quality of his state of wellness.

Self-Responsibility

This characteristic is the keystone of the structure. As Dr. Ardell wisely points out, "the single greatest cause of unhealth in this nation is that most Americans neglect, and surrender to others, responsibility for their own health."[1] For the most part, Americans are self-indulgent. They do not want to give up that which is the "American Way," as they have come to know it. "The biggest factor accounting for insufficient self-responsibility in our society is

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[1]Donald B. Ardell, High Level Wellness, p. 94.

probably the lack of effective health education to date."[1] In his book, Dr. Ardell identifies nine self-responsibility principles[2] which point up and help shape the attitude fundamental to this wellness characteristic.

Nutritional Awareness

"The major diet-related health hazard in our country is the combination of over-consumption and undernutrition, and a long list of ills is associated with this deadly duo."[3]

A. U.S. Senate select committee report, capsulizes this topic very succinctly. "We have reached the point where nutrition, or the lack or the excess, or the quality of it, may be the nation's Number 1 public health problem. The threat is not beri-beri, pellagra, or scurvy, rather we face the more subtle, but also more deadly reality of millions of Americans loading their stomachs with food which is likely to make them obese, give them high blood pressure, induce heart disease, diabetes, and cancer -- in short, to kill them over the long term."[4]

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[1]Donald B. Ardell, High Level Wellness, p. 97.

[2]Ibid., pp. 98, 99, 100.

[3]Ibid, p. 113.

[4]"Nutrition and Health: An Evaluation of Nutrition and Surveillance in the United States," U.S. Senate, (Select Committee on Nutrition and Human Needs), Washington, D.C., Government Printing Office, 1975, p. 5.

The emphasis in this wellness dimension is the need to know the chemical balance necessary to good health to support body functioning. This nutritional understanding can be divided into primary (basic) and supportive (additive) needs for the body to achieve a high degree of wellness. The reliance on natural or live foods, and the avoidance of foods which have been suspected of having carcinogenic ingredients is fundamental in this area.

Stress Management

Hans Selye, author of a book entitled "Stress Without Distress," claims that stress can be good as well as bad. He defines it as "the non-specific response of the body to any demand upon it."[1]

Stress is important to the wellness concept in that it gives life vitality and reduces boredom. Wellness, however, emphasizes the management of stress not the elimination of it totally.

Long-term stress has been associated with tension, insecurity, frustration, etc. These conditions have been magnified in migrain headaches, peptic ulcers, heart attacks, hyper-tension, bowel irritations, mental illness, suicide, skin disorders, etc. "Emotional stress causes the body to go out of balance, the immunity system to break down, and

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[1]Hans Selye, Stress Without Distress, Lippincott, New York, 1974, p. 111.

cells to malfunction and deteriorate more rapidly than normal. If you combine poor management of stress factors with reckless nutrition, disregard for exercise, dependence on the medical system, and an adverse environment, you get a lifestyle guaranteed to produce disease and premature death."[1]

For high-level wellness, it is not essential that the person concentrate on the evasion of stress--which is foolhardy--but rather the management of it.

Environmental Sensitivity

"An attitude to life which seeks fulfillment in the single minded pursuit of wealth - in short, materialism - does not fit into this world, because it contains within itself no limiting principle, while the environment in which it is placed is strictly limited. Already, the environment is trying to tell us that certain stresses are becoming excessive. As one problem is being "solved" ten new problems arise as a result of the first "solution." As Professor Barry Commoner emphasizes, the new problems are not the consequences of incidental failure but of technological success."[2]

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[1]Donald B. Ardell, High Level Wellness, p. 135

[2]E. F. Schumacher, Small Is Beautiful: Economics As If People Mattered. Harper & Row, New York, NY, 1973, pp. 29-30.

Radioactive "dumps," polluted streams and rivers, contamination of the atmosphere which are being discovered and attacked in the past decade highlight the truism of the above statement. The environment has been insidiously exploited and compromised excessively.

This component of Ardell's wellness model, environmental sensitivity, is not specifically included in other models proposed by different authors. It, nonetheless, has an important role to play in achieving a healthy lifestyle.

To better understand this dimension, it needs to be separated into its three basic components. These are the physical, the social, and the personal aspects of our surroundings.[1] The physical aspect refers to the air, water, land, and other physical realities in our lives.

The social aspect deals with the way our culture, government, and economy effects our lives.

The personal component of our environment refers to the extent that immediate surroundings help or hinder us in achieving and maintaining a wellness lifestyle.[2]

While little can be done, individually, to change the physical or social aspects of our lives, something can be

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[1]Ardell, High Level Wellness, p. 174.

[2]Ibid., p. 174.

done in our personal component to help us reach a goal of optimal health. It is in this component that individuals should invest the major portion of their time and effort.

Dr. Leland R. Kaiser, associate professor of preventive medicine, at the University of Colorado Medical Center has been encouraging individuals to become what he calls "eco-space design engineers."[1] This concept involves planning one's immediate surrounding to be more conducive to a wellness lifestyle. Examples would be designing and/or arranging the office or home in a way in which the person will achieve optimal efficiency with the least amount of distractions and stress producing activities. This attention to the environment can limit the number of bad influences on one's health. A recent observation on smoking indicates that restricting smoking in one's office and/or home can enhance a healthy lifestyle. This sensitivity can be extended into public eating places where "no smoking" areas have been designated. Selecting telephones with soft tones instead of the usual bellringer could help reduce tension and create a more tranquil atmosphere. Purchasing a silent photo copy machine could also reduce the noise level in an office. The central theme in all of these ideas

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[1]Leland R. Kaiser, "The Ecosystem Model: Designing Organizational Environment," A Paper Presented at the Annual Meeting of the Society of General Systems Research, New York, January, 1975.

is to establish surroundings which are conducive to a healthy lifestyle. This concept not only applies to the office or home, but also the city and geographical area. There is a need for planning and control over environmental factors to achieve optimal wellness.

Physical Fitness

The average person does not argue the value of physical fitness as a basic ingredient to good health. The argument most probably lies in the kind and degree of exercise. Most persons will agree that inactivity can only result in cardiovascular pulmonary problems, gastro-intestinal problems, motor activity problems, or mental health problems. The argument most probably lies in the kind and degree of exercise or activity whether it be physical and/or mental. Needless to say, this dimension is the "homogenizer" of the other four dimensions of wellness.

It is absolutely essential that all dimensions of self-responsibility, nutritional awareness, stress management, environmental sensitivity and physical fitness be integrated when developing a wellness lifestyle. By doing this, integrating the dimensions, a lifestyle can be designed which will involve the individuals whole being - physically, emotionally, mentally, and spiritually.[1]

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[1]Travis, Wellness Workbook: A Guide to Attaining High Level Wellness, 2.

Dr. Travis further states that "Wellness is an ever-expanding experience of purposeful, enjoyable living...[1] Simply stated it means exercising options within the various dimensions in such a way as to maximize health.

A cost benefit analysis would prove the economical desirability of wellness over less health lifestyles. The annual economic cost (including lost earnings) of smoking and alcohol abuse in the United States is $59.6 billion or about one-fourth of the total estimated health care expenditures for this year.[2] Certainly this capital could have been spent on more useful, healthy and socially beneficial ventures. It should be convincingly evident that there are economical as well as health benefits to be found in wellness activities.

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[1]Travis, Wellness Workbook: A Guide to Attaining High Level Wellness, 2.

[2]U.S. Department of Health, Education and Welfare, Healthy People: The Surgeon General's Report on Health Promotion and Disease, Background Papers, 1979, p. 444.

CHAPTER VI

THE POLITICAL SCIENCE PARADIGM - A HEALTH PROMOTION MODEL

In this chapter the writer will describe the "Health Promotion Model" patterned on a "Political Science Paradigm*." A "policy process system" mode will be established to relate the

- Policy Process Activities
- Election Campaign Activities
- Health Promotion Activities

The analogous nature of the three systems will be described. The concluding remarks will present the notion that a health promotion campaign, if patterned on a political election campaign, could produce results as intense, dramatic, fruitful and effective as the election campaign.

The matrix for the hypothesis comes from the works of Charles O. Jones. In his book "An Introduction to the Study of Public Policy" he establishes "the Public Policy Process."[1] This process is divided into systems and activities. (See Exhibit I)

*Paradigm - An example to be used as a pattern for other models.

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[1]Charles O. Jones, An Introduction To The Study of Public Policy, Wadsworth Publishing Company, California, 1970, pp. 6-16.

The systems which are identified as

- Problem Identification System
- Formulation System
- Legitimation System
- Application System
- Evaluation System
- Solution

establish the "common denominator" for comparing the activities described earlier.

The policy process conceived by Dr. Jones uses broad, generic activities to describe the various systems.

ACTIVITIES	SYSTEMS
Perception	
Definition	Problem
Aggregation	Identification
Organization	System
Representation	
Formulation	Formulation System
Legitimacy	Legitimation
Legitimation	System
Application	Application System
Reaction	Evaluation
Evaluation	System
Resolution	Solution
Termination	

This matrix is very significant and fundamental to any process whereby populations are to be influenced to behave to achieve a preconceived posture.

In the development of this hypothesis the six-stage systems are crucial and skeletal. The writer feels secure in speculating, at this point, that the "six-stage systems" are applicable to a multi-disciplinary as well as an inter-disciplinary consideration of our practicing society.

Dr. Robert Agranoff in his book "The Management of Election Campaigns" devises a sequence of activities which are fundamental to a successful and possible unsuccessful election campaign.[1] The point here, is that these activities are basic to carrying out the campaign.

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[1]Robert Agranoff, The Management of Election Campaigns, Holbrook Press, Boston, 1976, pp. 455-566.

By using Dr. Jones's policy process systems and infusing Dr. Agranoff's election campaign activities, the analogy becomes apparent.

Identify Mission Identify Target Area Sound-Out Candidacy Sound-Out Political Party Recruit Core Leaders Information Assessment: (Issues, Election Data, Polls)	Problem Identification System
Recruit Task Leaders Set Organization Strategic Assessment (Priorities, Plans, Tactics)	Formulation System
Plan Activities Into Key Events (Solicit Funds, Literature, Meetings)	Legitimation System
Begin Activities Implement Events The Election	Application System
Post Election Polls Election Returns	Evaluation System
Win or Lose	Solution

The true conversion is realized when the works of Green, Deeds, Kreuter and Partridge are also infused into Dr. Jones's political process systems. In their book, "Health Education Planning - A Diagnostic Approach," they delineate activities which are fundamental to an effective health promotion campaign.[1]

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[1]Lawrence W. Green; Marshall W. Kreuter; Sigrid G. Deeds; and Kay B. Partridge, Health Education Planning - A Diagnostic Approach, Mayfield Publishing Company, California, 1980, pp. 2-16, 52-66.

Again the analogy is apparent:

Identify Target Area & Mission Identify Means of Access Identify Persons with Influential Base Information Assessment: (Assess Quality of Life Prioritize Health Problems)	Problem Identification System
Secure Cooperation of Influential Persons Devise Plan with Influential Persons Set Strategy & Tactics Set Activities	Formulation System
Plan Activities Into Key Events	Legitimation System
Begin Activities Implement Events	Application System
Measure Levels of Achievement	Evaluation System
Continuous Process	Solution

As stated earlier in this paper the writer feels there is a very real analogy between the political election campaign and a health promotion campaign. The writer hastens to point out that this model is submitted to be used in concert and collaboration with other health promotion efforts. It cannot stand on its own merits alone. It is another promotion medium to add to the already existing efforts.

CHAPTER VII

A CASE STUDY

The effectiveness of using a political campaign model to conduct a health promotion effort was initiated on October 1, 1979 with a meeting of the research group. The team consisted of:

Professor Edward J. Arlinghaus	Xavier University
Mrs. Sue Basta	University of Cincinnati (Health U.C.)
Mrs. Linda Ferris	Ohio State University
Dr. Nelson Kraus, M.D.	Wellness Physician
Ms. Lori Levin	University of Cincinnati (Health U.C.)

The following is an account of the events which took place. The health promotion model described on Page 61 is the format for this case study.

1. PROBLEM IDENTIFICATION SYSTEM

1a. Identify Target Area & Mission

Brown County, in the Southwest corner of the state of Ohio, was selected as the target area. (See Exhibit III for general information about Brown County.) The mission was to organize a health promotion effort to improve health awareness on the part of the citizens of Brown County.

1. (continued)

1b. Identify Means of Access

The means of access to the citizens of the county was influential persons, or opinion leaders, who held positions which could establish credibility with a constituency of citizens. Examples are: president of local women's club, manager of local radio station, pastor of a religious parish or community, etc.

1c. Identify Persons with Influential Base

Research associates, Mrs. Basta and Mrs. Ferris, are local residents of Georgetown, Ohio. The programs they supervise service the total Brown County area. In collaboration with Professor Arlinghaus, Dr. Kraus and Miss Levin, a list of 55 "opinion leaders" in Brown County was compiled. (See Exhibit IV)

1d. Information Assessment

Assess Quality of Life

The research team devised a survey instrument (See Exhibit V) which was sent to the opinion leaders to assess the health status of Brown County as they viewed it. The

1. (continued)

1d. survey instrument quieried "Health Problems" (Physiological) and Social Problems (Behavioral). The questionnaire was sent to the 55 influential leaders. Twenty-five responded immediately. Fourteen responded on telephone followups. Thirty-nine was the total response.

Prioritize Health Problems

Exhibit VI discloses the respondents to the questionnaire. There was a 71% response. See Exhibit VI for results. Significant in this survey is the following:

1. The following are prioritized health problems (Averages are on a scale of 1 to 5)

1.	Smoking	3.91
2.	Nutrition	3.64
3.	Alcoholism	3.61
4.	Colds & Flu	3.49
5.	Dental	3.41
6.	Environment	3.30
7.	Physical Fitness	3.28
8.	Auto Accidents	3.26
9.	Stress Management	3.19

2. The nine perceived health problems identified above are all influenced by personal behaviors and lifestyles.

2. FORMULATION SYSTEM

2a. Secure Cooperation of Influential Persons

All 55 persons originally identified as opinion leaders were invited to a dinner meeting to discuss the results of the health assessment. The meeting occurred on May 14, 1980 in Georgetown, Ohio. It started at 6 p.m. and ended promptly at 8 p.m. There were 10 persons in attendance.

The agenda for the evening comprised:

- A welcome by Mrs. Ferris
- A "Wellness" presentation by Dr. Kraus
- A review of the survey results by Professor Arlinghaus
- An open discussion to devise a plan to promote health lifestyles.

2b. Devise Plan with Influential Persons

In an open discussion at the end of the meeting on May 14, 1980 the following was established:

1. Nutrition was identified as the component of "High Level Wellness" on which the group wanted to concentrate initially.
2. Salt, Sugar, Vitamin C and Fiber selected as the items in nutrition which were to be addressed.

2b. (continued)

3. The health promotion must carry a positive theme. Emphasis was to be placed on health concepts vs. illness concepts.

4. The research staff was to spend the summer to design a specific plan to recommend to this group in the fall of 1980.

2c. Set Strategy and Tactics

After several meetings of the research staff during the months of June and July the following resulted:

1. The book "What's To Eat - U.S. Department of Agriculture Yearbook, 1979" was found to be informative in providing novel insights and relevant information in designing the promotion.

2. A series of wallet-type cards would be designed as an information medium during the health promotion.

3. The first phase of five phases would address the subject of nutrition and cover four months. Phases 2, 3, 4 and 5 would address the subject of Self-Responsibility, Environmental Sensitivity, Stress Management and Physical Fitness.

2c. (continued)

3. The priority of these four items would be decided by the opinion leaders of Brown County.

4. Phase 1 would be implemented as follows:

September	-	Salt
October	-	Sugar
November	-	Vitamin C
December	-	Fiber

5. The underlying theme of the health promotion would be positive (wellness-oriented) in nature. Each message on the wallet-type cards would carry a personal challenging concept.

2d. Set Activities

A "wallet-type" fold over card was designed. (See Exhibit VII)

The Phase 1 topic was Nutrition. Phase 1 was to occur during the months of September, October, November, and December.

The subject during September was "salt."

The mission was to increase the awareness of the citizens in Brown County on the positive facts about salt. The result desired

2d. (continued)

was an individual assessment of one's use of salt in relation to body needs and the voluntary modification of lifestyles.

The wallet type card was titled a "Sense-ogram."

"Sense" is an acronymn for

Self-Responsibility
Exercise
Nutritional Awareness
Stress Management
Environmental Awareness

-ogram is a message.

It was concluded that salt is primarily a spice and therefore more desirable for taste than nutrition.

The Tongue is the key to taste. Therefore, the notion of a "Tongue Map" was selected.

The slogan for the month of September was "Try the Tongue Test!"

Four different messages were composed for four separate distributions of the Sense-ogram. (See Exhibit VII- pp. 115, 116)

2d. (continued)

1st distribution - Yellow Card - "1/8 of a teaspoon of salt will meet the average person's daily salt needs."

2nd distribution - Blue Card - Most Americans consume approximately 2 tablespoons of salt a day. The body needs only 1/8 of a teaspoon.

3rd distribution - Green Card - Taste is a matter of habit! You like what you get used to!

4th distribution - Pink Card - "All foods have salt! Read labels!"

3. LEGITIMATION SYSTEM

3a. Plan Activities Into Key Events

At a meeting held on 25 November 1980 in Georgetown, Ohio the interested parties had dwindled to just three groups:

- The Senior Citizen Group
- The Home-Makers Group
- The College Student Group

Representatives of these three groups consented to engage in the health promotion campaign. They would:

1. distribute the "Sense-ogram" to their constituency,
2. record the persons who received the "Sense-ogram,"
3. follow-up regularly to reinforce interest in the message in the "Sense-ogram,"
4. supervise a survey instrument activity to be carried out at the end of Phase 1.

4. APPLICATION SYSTEM

4a. Begin Activities

At a meeting on 27 January 1981 in Georgetown, Ohio four sets of "Sense-ograms" were distributed to:

4a. (continued)

- The Senior Citizen Group
- The Home-Makers Group
- The Student Group

4b. Implement Events

The following schedule was agreed upon:

1st distribution - Yellow Card - distributed first week in February

2nd distribution - Blue Card - distributed first week in March

3rd distribution - Green Card - distributed first week in April

4th distribution - Pink Card - distributed first week in May

Evaluation - conducted last week of May

5. EVALUATION SYSTEM

5a. Measure Levels of Achievement

The perplexing question of measuring actual change in personal lifestyle of humans is non-descript. In designing a measurement

5a. (continued)

tool, many qualified sources were contacted. To name a few:

- Dr. William Meyer - University of Cincinnati - Department of Psychology
- Dr. Clovis Shephard - University of Cincinnati - Medical School Sociologist
- Mr. Sewell Milliken - Ohio University - Health Planning
- Dr. Saul Benison - University of Cincinnati - School of Medicine

It was decided that two measurement activities would be employed. An unobtrusive measure of observing to determine impact of the Sense-ogram on the recipient to use it. A scientific measure of questioning to determine the impact on the perceived lifestyle of the user. On approximately the 15th of each distribution month, the opinion leaders would be interviewed to determine:

- How they issued the Sense-ogram
- What did recipient do with it
- Were there any initial emotional reactions

5a. (continued)

- Were any sense-ograms observed
  - discarded in the immediate vicinity
  - discarded in the hallways
  - discarded in the restrooms
  - discarded in the parking lots
  - discarded in the cafeteria

It is expected some assessment can be made regarding initial acceptability of the Sense-ogram. Specifically, "Was it novel and inviting enough for the recipient to retain it after initial review."

During the last week of May a questionnaire (See Exhibit VIII) would be managed by the opinion leader to compile a general concensus on lifestyle change.

6. SOLUTION

6a. Continuous Process

In the Health Promotion Model there is no final solution. The activities must return to 1d. Information Assessment. Here the next item to be promoted is identified and a plan to improve the quality of life continues. It could be a recycling of the activities and events which were conducted previously.

Based on this case study it is reasonable to conclude that a relevancy does exist between a political election campaign and a health promotion effort. This relevancy rests on activities of each respective model being germane to the five systems of Jones' Political Process.

CHAPTER VIII

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The purpose of this research was to examine the fields of political science and health education to design a health promotion model using the political election campaign as a process format.

Having designed the model, a demonstration was to be conducted using a "Wellness" health concept as the subject of the health promotion.

A review of the literature on health promotion produced a very sketchy and fragmented resource of enlightened writings. Health promotion as an activity has taken on a new definition in contrast to health education in the past decade.

Behavior change models were found to be described in the fields of psychology, epidemiology, sociology, political science, and business. However, the literature review did not reveal any previous attempts to fashion a health promotion effort based on a political election campaign format.

The cognitive research in this study examined four bodies of knowledge:

A. The nature of health promotion

B. The nature of wellness promotion

C. The relevancy of a political election campaign to a health promotion effort

D. The testing of the hypothesis

The following conclusions were drawn:

A. Regarding the nature of health promotion

1. Technological advances and "Americanized" living have complicated the lifestyles of people. Stress management, nutritional awareness and environmental sensitivity are factors which are much more vital today than they were in the past.
2. Determination of self-responsibility for health is fundamental and vital to the development of a healthy lifestyle.
3. Health education has been the traditional process to promote health.
4. Health promotion has recently been defined as a process separate from health education.
5. Although a true distinction has been described between health education and health promotion, they are siamese in nature -- one cannot take place without the other.
6. The significant difference between health education and health promotion is the audience impact from the origination thrust.

B. Regarding the nature of wellness

1. Wellness as a concept of health is gaining national as well as international popularity.
2. A total wellness program must address the harmony of an individual's mind, spirit and body in concert with the individual's environment.
3. Harmony of mind, spirit and body is a sage and ancient concept. It is as old as recorded time.
4. Since 1940 healing in the United States has been divided into three distinct systems:
   - Mental Health
   - Spiritual Health
   - Physical Health
5. Since 1940 emphasis has been placed on treatment of sickness rather than promotion of wellness.
6. Presently there is a need to develop indices of wellness to complement indices of sickness which are in existence.

C. Regarding the relevancy of a political campaign to a health promotion effort.

1. There is a relevancy between the political election campaign and the health promotion

effort. The "common denominator" in relating these activities is the five systems identified in Jones' Public Policy process.

2. The case study in demonstrating the relevancy pointed out several blatant shortcomings:
   a. There is a need for an on-site organizer and catalyst. Just as the political campaign has a campaign manager totally involved -- a health promotion campaign needs a similar energy source to maintain interest and react to and with the opinion leaders.
   b. Opinion leaders were cooperative in participating in the "health needs assessment." Thirty-nine (39) of the fifty-five (55) designated opinion leaders (71%) responded to a lengthy questionnaire. However, opinion leader interest waned when invited to participate in the health promotion. At the first meeting designed to "secure cooperation of influential persons," only 10 persons attended. An 18% response. At the meeting arranged to "begin activities and implement events," of the 55 opinion leaders in Brown County identified one year earlier, only 3 participated. A 5% response.

3. The attempt to construct a valid measurement technique for determining change in personal lifestyle is non-descript. The whole notion of invasion of privacy, of individuals, presents a major obstacle. Also, since this method of health promotion involves opinion leaders and constituencies the possibility of a control group would compromise the desired effect. And finally in using a questionnaire to determine lifestyle change the researcher is confronted with the same phenomenon the opinion polls present during an election campaign. What people report in opinion polls is not necessarily the way they will vote on election day.

As a consequence of these conclusions the recommendations center primarily on the need for further research.

RECOMMENDATIONS

The recommendations emanating from this study involve further research.

1. Indices of "wellness" need to be established. Just as a persons degree of illness can be determined presently, similar determination of degrees of wellness need to be developed.
2. The effective integration of multi-disciplines in designing health promotion efforts need intensive exploration and application.
3. In the conduct of a health promotion effort designed in a political election campaign paradigm there are three critical areas for intensive research:
   - the technique for involving and retaining "opinion leader" interest, particularly after the health assessment stage.
   - the alternate techniques which can be employed by "opinion leaders" in promoting healthy lifestyles.
   - the design of measurement instruments which validly reflect changes in lifestyle behavior.

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APPENDIX

Appendix A - Glossary of Terms

Appendix B - Exhibits

APPENDIX A

GLOSSARY OF TERMS

Acute Care	Care rendered to a patient which is characterized by a single episode of a fairly short duration from which the patient returns to his normal or previous state of and level of activity.
Constituency	A body of persons having the power to appoint or elect a leader; or to form or revise an organizational platform.
Health Education	Any combination of learning opportunities designed to facilitate voluntary adaptations of behavior (in individuals, groups, or committees) conducive to health.
Health Promotion	Any combination of health education and related organizational, political and economic interventions designed to facilitate behavioral and environmental adaptations that will improve or protect health.
High Level Wellness	An integrated method of functioning which is oriented to maximizing the potential of which an individual is capable within the environment in which he is functioning.
Intensive Care	A highly staffed and controlled environment designed to offer life saving and life sustaining supplies, equipment and personnel resources. Often necessitates a one-nurse-to-one-patient to provide necessary minute-by-minute observation reaction, and response-action processes.

GLOSSARY OF TERMS (Continued)

Intermediate Care	Care for patients requiring a moderate amount of nursing care. Patient may be ambulatory for short periods of time. Emergency care and frequent observation are rarely needed. Included in this group are those patients who are beginning to care for themselves. In addition the terminally ill may be cared for in this.
Lifetime Health Monitor Program	An innovative program of routine preventive health care. Preventive services are designed to accomplish health goals established in a ten-period life span.
Model	A miniature representation of a thing; a facsimile.
Opinion Leader	An individual who is able to informally influence other individuals attitudes or overt behavior in a desired way with relative frequency. Opinion leadership is earned and maintained by the individuals technical competence, social assessibility and conformity to a system's norms.
Orthobiosis	Living right. A term coined by Eli Metchnikoff to encompass all the factors that may effect longevity and well being.
Paradigm	An example to be used as a pattern for other models.
Premature Death	Termination of life in a relatively young person which could be preventable.

GLOSSARY OF TERMS (Continued)

Preventive Practice	That attitude and behavior exhibited to promote one's own good health.
Self Care	Care required ambulatory and physically self-sufficient patients requiring therapeutic or diagnostic services, or who may be convalesing.
Self Optimization	Personal achievement of the highest level of physical, mental and spiritual realization at one's biological age.
Terminal Care	Care providing the physical, social, psychological and spiritual needs of the dying patient and his/her family. Treatment is administered by a team of professionals - physicians, nurses, social worker, religious and psychiatric plus the family.
Wholistic Health Practice	An ambulatory health promotion and education clinic which assesses the clients physical, mental and spiritual wellness. Basic treatment rests with the client's willingness to carry out a health plan of which he is instrumental in designing.

APPENDIX B

ILLUSTRATIONS

A POLITICAL SCIENCE PARADIGM

A HEALTH PROMOTION MODEL

THE POLICY PROCESS SYSTEMS*		THE ELECTION CAMPAIGN**	THE HEALTH PROMOTION MODEL***
ACTIVITIES	SYSTEMS		
Perception, Definition, Aggregation, Organization, Representation	Problem Identification System	Identify Mission	Identify Target Area & Mission
		Identify Target Area	Identify Means of Access
		Sound-Out Candidacy	Identify Persons With Influential Base
		Sound-Out Political Party	Information Assessment: (Assess Quality of Life Prioritize Health Problems)
		Recruit Core Leaders	
		Information Assessment: (Issues, Election Data, Polls)	
Formulation	Formulation System	Recruit Task Leaders	Secure Cooperation of Influential Persons
		Set Organization	Devise Plan with Influential Persons
		Strategic Assessment: (Priorities, Plans, Tactics)	Set Strategy & Tactics
			Set Activities
Legitimacy Legitimation	Legitimation System	Plan Activities Into Key Events	Plan Activities Into Key Events
		(Solicit Funds, Literature, Meetings)	
Application	Application System	Begin Activities	Begin Activities
		Implement Events	Implement Events
		The Election	
Reaction Evaluation	Evaluation System	Post Election Polls	Measure Levels of Achievement
		Election Returns	
Resolution Termination	Solution	Win or Lose	Continuous Process

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Edward J. Arlinghaus, June 1980

EXHIBIT I

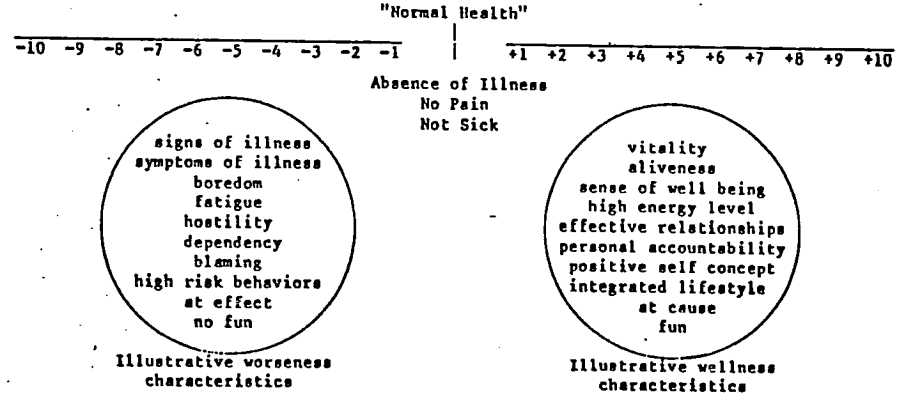
DONALD B. ARDELL, Ph.D.
EDITOR, AMERICAN JOURNAL OF HEALTH PLANNING

THE WORSENESS/WELLNESS CONTINUUM

High level wellness is a lifestyle approach to realizing your best potentials for well being. It encompasses physical, emotional, and mental health - it is complementary to but different from health education, prevention, and holistic health. A wellness lifestyle is pursued only after you have made a conscious commitment to your own best potentials - the reality of wellness is that it is a positive approach chosen as a richer way to be alive. It is simply a lot more fun - whatever your values - than the more common though often unconscious alternative - low level worseness.

A wellness lifestyle has five dimensions - self responsibility, nutritional awareness, stress management, physical fitness, and environmental sensitivity. All dimensions are equally important; a wellness lifestyle entails an integrated approach encompassing awareness in each of these key areas. In addition to this integration or balanced idea and the notion that wellness is a positive, enjoyable way to a lifetime pursuit of life enrichment, a wellness philosophy is based on an acceptance that you are unique - and that the approach you shape must be in accord with your individual preferences, background, values, and needs. These basic ideas, along with ten foundation wellness principles (e.g., "heed not the counsel of the unfit physician") are described in High Level Wellness: An Alternative to Doctors, Drugs, and Disease (Rodale Press, 1977).

Where are you on the worseness/wellness continuum? Place an x on the continuum where you think you are now. For most people, being healthy has meant not being sick. This "normal" concept of health, shown at the mid-point on the scale below, creates an expectation of mediocrity that in itself is sickening.



In your experience, how many of the following agents or institutions would you place to the right of the center point on the continuum because they support your being on the wellness side of life?

Doctors	Restaurants	Health food stores
Hospitals	Bars	Supermarkets
Your mate	Parties	Your environment
Parents	Your friends	The "norms" you live with
Insurance companies	Health planners	Your goals
Your job	The schools	Your profession

Think about other aspects of your life - and the extent to which they support you in being oriented to the wellness side of the continuum.

What are the barriers/obstacles you face?

What might you consider doing about them?

At what point in your life were you farthest along to the right on the continuum?

What might optimum wellness be like for you? How might you feel? Look? How might your life be different?

What might you do in the next three months in order to advance to the right of the continuum into the range of a wellness lifestyle? Organize your notes in the categories of the five wellness dimensions.

396 Durant Way
Mill Valley, CA 94941

High Level Wellness: An Alternative to Doctors, Drugs, and Disease
To order, contact: Ellen Green, The Rodale Press, Organic Park, Emmaus, PA 18049 (215) 967-5171

EXHIBIT II

EXHIBIT III

BROWN COUNTY - GENERAL INFORMATION

NUMBER OF ROAD MILES	
County Roads 343 miles	
Township Roads 425 miles	
State Roads 192 miles	
Total Road Miles in County	960
NUMBER OF RAILROAD LINE MILEAGE	21.3
NUMBER OF RIVER FRONT MILES	24
U.S. CORP OF ENGINEER DOCKING SITES	
Higginsport & Ripley	Two
NUMBER OF AIRPORTS	
Brown County Airport - Georgetown 3,500 ft. long	
Tyler Airport - Aberdeen 3,300 ft. long	Two
RURAL WATER LINES MILES OUTSIDE CORPORATION LIMITS	
Lines already installed	
Lines ready to be laid	
Total	

OHIO'S ONLY TOBACCO MARKET located at Ripley, Ohio

BIRTH PLACE OF WHITE BURLEY TOBACCO, Higginsport, Ohio

AGRICULTURAL INCOME BASED ON 1978 OSU REPORTS $28,838,000.00
Comprising of the following breakdown: Soybeans 30%, Tobacco 25%, Cattle 12%, Dairy 11%, Corn 10%, Hogs 8%, Hay 2% & Wheat 2%.

NUMBER OF BUSINESSES EMPLOYING OVER 300 EMPLOYEES	
U.S. Shoe Corporation	One
NUMBER OF BUSINESSES EMPLOYING OVER 200 EMPLOYEES - BUT LESS THAN 300	
Cincinnati Milacron	
Brown County Hospital	
Ortner Freight Car Co.	Three
NUMBER OF BUSINESSES EMPLOYING OVER 100 EMPLOYEES - BUT LESS THAN 200	
Professional Convalescent Products	
Mac Tools, Inc.	Two

EXHIBIT III
(continued)

BROWN COUNTY - GENERAL INFORMATION

NUMBER OF BUSINESSES EMPLOYING
OVER 50 EMPLOYEES - BUT LESS THAN 100
Kiblers
Pepsi Cola Bottling Co.
Hamer Corporation — Three

HISTORICAL POINTS OF INTEREST
Rankin House, Ripley, Ohio
Grant's Boyhood Home, Georgetown, Ohio
Grant's School House, Georgetown, Ohio

BROWN COUNTY AGRICULTURAL SOCIETY (Brown Co. Fair Board)
Founded 1854

NUMBER OF GOLF COURSES LOCATED IN BROWN COUNTY
Buttermilk Falls Golf Course, Georgetown
Friendly Meadows Golf Course, Hamersville
Lakewood Golf Course & Restaurant, Georgetown
White Oak Valley Inc. Golf Course, Sardinia - Four

OHIO DESIGNATED AS THIRD GULF COAST OF THE UNITED STATES

YEAR ORGANIZED 1817

FIRST SETTLER Belshazzar Dragoo

NAMED AFTER General Jacob Brown, an Officer of the War of 1812

FIRST COUNTY SEAT Ripley, Ohio

CURRENT COUNTY SEAT Georgetown, Ohio

NUMBER OF ACRES IN BROWN COUNTY 317,400

POPULATION (Approximate) 31,000

NUMBER OF INCORPORATED VILLAGES
Aberdeen, Fayetteville, Georgetown, Hamersville,
Higginsport, Mt. Orab, Ripley, Russellville,
Sardinia, & St. Martin — Ten

BROWN COUNTY - GENERAL INFORMATION

NUMBER OF BANKS Bank of Russellville, Citizens National of Ripley, Citizens Bank of Higginsport, Brown Co. National Bank, First National Bank of Georgetown, First National Bank of Sardinia, Peoples National Bank of Georgetown & Hamersville, & Ripley National Bank	Eight
NUMBER OF BUILDING & LOANS Ripley Federal S & L, Security S & L - Mt. Orab, and Southern Ohio S & L - Georgetown	Three
NUMBER OF SECONDARY SCHOOLS Eastern Local, Fayetteville Local, Georgetown Exempted Village School, Ripley Local, and Western Brown	Five
NUMBER OF COLLEGES Chatfield College & Southern State Community College	Two
NUMBER OF VOCATIONAL SCHOOLS Southern Hills JVS	One
NUMBER OF LIBRARYS George Public Library, Ripley Public Library, & Southern State Community College Library	Three
NUMBER OF MAJOR HIGHWAYS U.S. 52, U.S. 62, U.S. 78, S.R. 32, S.R. 50, & S.R. 125 U.S. 52 designated as Fifth most scenic route in the United States between Portsmouth and Cincinnati	Six
NUMBER OF COVERED BRIDGES	Seven

Brown County Business & Professional Directory

EXHIBIT IV

CATEGORY/NAME/GROUP AFFILIATION	DATE SENT LETTER # 1	REC'D QUEST. BEFORE PHONE CALL	REC'D QUEST. AFTER PHONE CALL	DATE SENT 2'D LETTER--MEETING ANNOUNCEMENT	DATE REC'D RESPONSE CARD	WILL ATTEND	THOSE ATTENDING
YO-Brynn Ballou, Girl Scouts of America	2-15-80		✓	4-25-80	—	NC	
Y--Stormy Barricklow, Youth		✓					
M--Joe Bell, W.U.R.D.		✓					
C--Mrs. Edward Carrington, Russellville Women's Club		✓					
C--Edward Comer, HEALTH-U.C.		✓			(T)	✓	✓
SC-Peggy Cremer, Senior Citizen			✓		5/13 (T)		✓
YO-Becky Cropper, Brown Co. 4-H Extens. Service		✓			5/1	✓	✓
HP-John Donohoo, M.D., Health Prof.			✓				
C--Ms. Dale Dyer, Georgetown Women's Club		✓					
G--Edwin Dyer, Brown Co. Commiss.			✓		5/5	✓	
G--Stephen Ernst, Brown Co. Commiss.		✓					
R--Rev. David Fay, Brown Co. Ministerial Association					5/13		
Y--Doug Ferris, Youth		✓					
RE-Linda Gampher, ORBIT I		✓					
C--John Hook, Community							
SC-Mrs. John Houston, Senior Citizen			✓				
G--Robert Howser, Brown Co. Commiss.			✓		5/8		✓
E--Charles Huff, Brown Co. Board of Education							
C--Mrs. Raymond Johnson, Ripley Women's Progress Club			✓				
C--Trish Jones, Brown Co. Homemakers			✓		5/7 (T)	✓	✓
E--Bob Kratzer, Georgetown High School		✓					
E--Sr. Xavier Ladrigan, Chatfield College		✓			—	✓	✓
SC-Rev. Archie Lung, Senior Citizen		✓			5/7 (T)	✓	✓
SC-Mrs. Archie Lung, Senior Citizen		✓					
C--Robert Lyon, Georgetown Kiwanis Club							
RE-Harry Malott, Recreation					5/6		
C--Marge Manson, Georgetown Chamber of Commerce			✓		5/1	NC	
C--Edna Mills, Nutrition Aide			✓		5/1	✓	
C--Harry Molitor, Community					5/1	NC	
SC-Mrs. Harold Neu, Senior Citizen		✓					✓
C--Al Norris, ABCAP					—	✓	
C--Mrs. Pat Oberschlake, Brown Co. Farm Bureau Women		✓					
M--Eunice Ott, Brown Co. Press					5/6		
C--Gene Pittenger, Community		✓			5/4		
C--Dolly Plymale, ABCAP		✓					
C--Stan Purdy, Community							
M--Gene Rice, Ripley Bee		✓					
HP-Carol Rich, Brown Co. Unit, American Cancer Society							
E--Martha Rutherford, Education		✓			5/5		✓
C--John Ruthven, Community							
C--Judy Ruthven, Community		✓					
E--George Schaffer, Southern State College		✓					✓
Y--Dawn Schneider, Youth			✓		5/3		
HP-Dave Seesholtz, Health Prof.			✓		5/6		
HP-Evelyn Seesholtz, Health Prof.							
M--Charles Sharp, News Democrat							
Y--Betty Slouffman, Youth					5/15		
Y--Leslie Stith, Youth			✓				
C--Mrs. Lowell Thomas, Ripley Women's Club			✓				
HP-Daniel Van Antwerp, DDS, Georgetown District PTO		✓			4/30	NC	
E--Donald Wahl, Georgetown School Bd.		✓			5/3		
E--Bob Walker, Decatur Elem. School		✓					
YO-Lou Waugh, Boy Scouts of America							
Y--Greg Woods, Youth							
C--Ms. Jane Zachman, Dist. Women's Club		✓					

C - Community; E - Education; G - Government; HP - Health Professionals; M - Media;
R - Religion; RE - Recreation; SC - Senior Citizens; Y - Youth; YO - Youth Organizations

EXHIBIT V

BROWN COUNTY CITIZENS FOR HEALTH
Georgetown, Ohio 45121

February 15, 1980

Dear

We need your help! You have been selected to receive the enclosed questionnaire because of your involvement in, and knowledge of, the Brown County Community. Fifty other people in your area are also being contacted.

Your assistance in completing this questionnaire will provide us with basic information for an assessment of the health concerns in Brown County.

We have designed this questionnaire to require as little of your time as possible--approximately twelve minutes. We cannot overemphasize the importance of your early response--on or before March 5--as that is the day the questionnaires will be analyzed. All responses will remain confidential; reports of data will not disclose the identity of individuals.

Instructions:

Listed on the following pages are a number of health problems (diseases) and under each are listed four age groups.

On a scale of 1 - 5 where 1 = the disease is not a problem
3 = the disease is somewhat of a problem
5 = the disease is a very severe problem

please indicate to what degree you feel each age group is affected by that particular problem in your community by circling the appropriate number.

EXAMPLE: COLDS

Age	0 - 16	1	2	3	4	5
	17 - 35	1	2	3	4	5
	36 - 60	1	2	3	4	5
	Over 60	1	2	3	4	5

The above example illustrates the opinion of a person who feels that colds are:
a very severe problem for youth
a major problem for senior citizens
not a problem for those 36-60 years old
somewhat of a problem for people 17-35 years of age

If you have any questions, please call Linda Ferris, Cooperative Extension Service, 378-6716, or Sue Basta, HEALTH-U.C., 378-4171.

Thank you for your cooperation and participation in this survey. We will be in touch with you to discuss the results.

Sincerely,

Linda Ferris Sue Basta

vhf
enclosure

EXHIBIT V
(continued)

FOR OFFICE USE ONLY

		Not a Problem	Very Minor Problem	Somewhat of a Problem	Major Problem	Very Severe Problem	
4. CANCER (cont')							
Colorectal							
Age	0 - 16	1	2	3	4	5	____ 33
	17 - 35	1	2	3	4	5	____ 34
	36 - 60	1	2	3	4	5	____ 35
	Over 60	1	2	3	4	5	____ 36
Leukemia							
Age	0 - 16	1	2	3	4	5	____ 37
	17 - 35	1	2	3	4	5	____ 38
	36 - 60	1	2	3	4	5	____ 39
	Over 60	1	2	3	4	5	____ 40
Skin							
Age	0 - 16	1	2	3	4	5	____ 41
	17 - 35	1	2	3	4	5	____ 42
	36 - 60	1	2	3	4	5	____ 43
	Over 60	1	2	3	4	5	____ 44
Other Cancers							
Age	0 - 16	1	2	3	4	5	____ 45
	17 - 35	1	2	3	4	5	____ 46
	36 - 60	1	2	3	4	5	____ 47
	Over 60	1	2	3	4	5	____ 48
5. KIDNEY DISEASE							
Age	0 - 16	1	2	3	4	5	____ 49
	17 - 35	1	2	3	4	5	____ 50
	36 - 60	1	2	3	4	5	____ 51
	Over 60	1	2	3	4	5	____ 52
6. DIABETES							
Age	0 - 16	1	2	3	4	5	____ 53
	17 - 35	1	2	3	4	5	____ 54
	36 - 60	1	2	3	4	5	____ 55
	Over 60	1	2	3	4	5	____ 56
7. CIRRHOSIS OF THE LIVER							
Age	0 - 16	1	2	3	4	5	____ 57
	17 - 35	1	2	3	4	5	____ 58
	36 - 60	1	2	3	4	5	____ 59
	Over 60	1	2	3	4	5	____ 60

EXHIBIT V (continued)

0 1 _ _ _ _ _ _ _ _ _ _ 1
FOR OFFICE USE ONLY

1 - 12

PART ONE: HEALTH PROBLEMS

Listed below are a number of health problems (diseases) and under each are listed four age groups.

On a scale of 1 - 5 where 1 = the disease is not a problem
3 = the disease is somewhat of a problem
5 = the disease is a very severe problem
please indicate to what degree you feel each age group is affected by that particular problem in your community by circling the appropriate number. Please use the last page if you have any comments.

		Not a Problem	Very Minor Problem	Somewhat of a Problem	Major Problem	Very Severe Problem	FOR OFFICE USE ONLY
1. ARTHRITIS							
Age	0 - 16	1	2	3	4	5	____ 13
	17 - 35	1	2	3	4	4	____ 14
	36 - 60	1	2	3	4	5	____ 15
	Over 60	1	2	3	4	5	____ 16
2. HIGH BLOOD PRESSURE							
Age	0 - 16	1	2	3	4	5	____ 17
	17 - 35	1	2	3	4	5	____ 18
	36 - 60	1	2	3	4	5	____ 19
	Over 60	1	2	3	4	5	____ 20
3. HEART DISEASE							
Age	0 - 16	1	2	3	4	5	____ 21
	17 - 35	1	2	3	4	5	____ 22
	36 - 60	1	2	3	4	5	____ 23
	Over 60	1	2	3	4	5	____ 24
4. CANCER							
Lung							
Age	0 - 16	1	2	3	4	5	____ 25
	17 - 35	1	2	3	4	5	____ 26
	36 - 60	1	2	3	4	5	____ 27
	Over 60	1	2	3	4	5	____ 28
Breast							
Age	0 - 16	1	2	3	4	5	____ 29
	17 - 35	1	2	3	4	5	____ 30
	36 - 60	1	2	3	4	5	____ 31
	Over 60	1	2	3	4	5	____ 32

EXHIBIT V
(continued)

		Not a Problem	Very Minor Problem	Somewhat of a Problem	Major Problem	Very Severe Problem	FOR OFFICE USE ONLY
8. FOOT PROBLEMS							
Age	0 - 16	1	2	3	4	5	____ 61
	17 - 35	1	2	3	4	5	____ 62
	36 - 60	1	2	3	4	5	____ 63
	Over 60	1	2	3	4	5	____ 64
9. SIGHT (EYE) PROBLEMS							
Age	0 - 16	1	2	3	4	5	____ 65
	17 - 35	1	2	3	4	5	____ 66
	36 - 60	1	2	3	4	5	____ 67
	Over 60	1	2	3	4	5	____ 68
10. HEARING (EAR) PROBLEMS							
Age	0 - 16	1	2	3	4	5	____ 69
	17 - 35	1	2	3	4	5	____ 70
	36 - 60	1	2	3	4	5	____ 71
	Over 60	1	2	3	4	5	____ 72
11. DENTAL							
Age	0 - 16	1	2	3	4	5	____ 73
	17 - 35	1	2	3	4	5	____ 74
	36 - 60	1	2	3	4	5	____ 75
	Over 60	1	2	3	4	5	____ 76
12. SKIN DISORDERS							02 __ __ 1-4
Age	0 - 16	1	2	3	4	5	____ 5
	17 - 35	1	2	3	4	5	____ 6
	36 - 60	1	2	3	4	5	____ 7
	Over 60	1	2	3	4	5	____ 8
13. PNEUMONIA							
Age	0 - 16	1	2	3	4	5	____ 9
	17 - 35	1	2	3	4	5	____ 10
	36 - 60	1	2	3	4	5	____ 11
	Over 60	1	2	3	4	5	____ 12
14. EMPHYSEMA (LUNG) DISORDERS							
Age	0 - 16	1	2	3	4	5	____ 13
	17 - 35	1	2	3	4	5	____ 14
	36 - 60	1	2	3	4	5	____ 15
	Over 60	1	2	3	4	5	____ 16

EXHIBIT V
(continued)

		Not a Problem	Very Minor Problem	Somewhat of a Problem	Major Problem	Very Severe Problem	FOR OFFICE USE ONLY
15. BRONCHITIS							
Age	0 - 16	1	2	3	4	5	____ 17
	17 - 35	1	2	3	4	5	____ 18
	36 - 60	1	2	3	4	5	____ 19
	Over 60	1	2	3	4	5	____ 20
16. TB (TUBERCULOSIS)							
Age	0 - 16	1	2	3	4	5	____ 21
	17 - 35	1	2	3	4	5	____ 22
	36 - 60	1	2	3	4	5	____ 23
	Over 60	1	2	3	4	5	____ 24
17. ASTHMA							
Age	0 - 16	1	2	3	4	5	____ 25
	17 - 35	1	2	3	4	5	____ 26
	36 - 60	1	2	3	4	5	____ 27
	Over 60	1	2	3	4	5	____ 28
18. COLDS AND FLU							
Age	0 - 16	1	2	3	4	5	____ 29
	17 - 35	1	2	3	4	5	____ 30
	36 - 60	1	2	3	4	5	____ 31
	Over 60	1	2	3	4	5	____ 32
19. ALLERGIES							
Age	0 - 16	1	2	3	4	5	____ 33
	17 - 35	1	2	3	4	5	____ 34
	36 - 60	1	2	3	4	5	____ 35
	Over 60	1	2	3	4	5	____ 36
20. SEXUALLY TRANSMITTED DISEASES (VD)							
Age	0 - 16	1	2	3	4	5	____ 37
	17 - 35	1	2	3	4	5	____ 38
	36 - 60	1	2	3	4	5	____ 39
	Over 60	1	2	3	4	5	____ 40
21. OBESITY							
Age	0 - 16	1	2	3	4	5	____ 41
	17 - 35	1	2	3	4	5	____ 42
	36 - 60	1	2	3	4	5	____ 43
	Over 60	1	2	3	4	5	____ 44

EXHIBIT V
(continued)

		Not a Problem	Very Minor Problem	Somewhat of a Problem	Major Problem	Very Severe Problem	FOR OFFICE USE ONLY
22. OTHER (SPECIFY) _____							__ __ 45-46
Age	0 - 16	1	2	3	4	5	____ 47
	17 - 35	1	2	3	4	5	____ 48
	36 - 60	1	2	3	4	5	____ 49
	Over 60	1	2	3	4	5	____ 50
23. OTHER (SPECIFY) _____							__ __ 51-52
Age	0 - 16	1	2	3	4	5	____ 53
	17 - 35	1	2	3	4	5	____ 54
	36 - 60	1	2	3	4	5	____ 55
	Over 60	1	2	3	4	5	____ 56

EXHIBIT V
(continued)

PART TWO: SOCIAL PROBLEMS

Listed below are a number of social health problems and under each are listed four age groups.

One a scale of 1 - 5 where 1 = the disease is not a problem
3 = the disease is somewhat of a problem
5 = the disease is a very severe problem
please indicate to what degree you feel each age group is affected by the particular problem in your community by circling the appropriate number. Please use the last page if you have any comments.

		Not a Problem	Very Minor Problem	Somewhat of a Problem	Major Problem	Very Severe Problem	FOR OFFICE USE ONLY
1. OBESITY							03 __ __ 1-4
Age	0 - 16	1	2	3	4	5	_____ 5
	17 - 35	1	2	3	4	5	_____ 6
	36 - 60	1	2	3	4	5	_____ 7
	Over 60	1	2	3	4	5	_____ 8
2. SMOKING							
Age	0 - 16	1	2	3	4	5	_____ 9
	17 - 35	1	2	3	4	5	_____ 10
	36 - 60	1	2	3	4	5	_____ 11
	Over 60	1	2	3	4	5	_____ 12
3. SUBSTANCE ABUSE (DRUGS)							
Age	0 - 16	1	2	3	4	5	_____ 13
	17 - 35	1	2	3	4	5	_____ 14
	36 - 60	1	2	3	4	5	_____ 15
	Over 60	1	2	3	4	5	_____ 16
4. SUBSTANCE ABUSE (ALCOHOL)							
Age	0 - 16	1	2	3	4	5	_____ 17
	17 - 35	1	2	3	4	5	_____ 18
	36 - 60	1	2	3	4	5	_____ 19
	Over 60	1	2	3	4	5	_____ 20
5. SUICIDE							
Age	0 - 16	1	2	3	4	5	_____ 21
	17 - 35	1	2	3	4	5	_____ 22
	36 - 60	1	2	3	4	5	_____ 23
	Over 60	1	2	3	4	5	_____ 24

EXHIBIT V
(continued)

		Not a Problem	Very Minor Problem	Somewhat of a Problem	Major Problem	Very Severe Problem	FOR OFFICE USE ONLY
6. HOMICIDE							
Age	0 - 16	1	2	3	4	5	_____ 25
	17 - 35	1	2	3	4	5	_____ 26
	36 - 60	1	2	3	4	5	_____ 27
	Over 60	1	2	3	4	5	_____ 28
7. RAPE							
Age	0 - 16	1	2	3	4	5	_____ 29
	17 - 35	1	2	3	4	5	_____ 30
	36 - 60	1	2	3	4	5	_____ 31
	Over 60	1	2	3	4	5	_____ 32
8. MENTAL ILLNESS							
Age	0 - 16	1	2	3	4	5	_____ 33
	17 - 35	1	2	3	4	5	_____ 34
	36 - 60	1	2	3	4	5	_____ 35
	Over 60	1	2	3	4	5	_____ 36
9. AUTOMOBILE ACCIDENTS							
Age	0 - 16	1	2	3	4	5	_____ 37
	17 - 35	1	2	3	4	5	_____ 38
	36 - 60	1	2	3	4	5	_____ 39
	Over 60	1	2	3	4	5	_____ 40
10. FARMING RELATED ACCIDENTS							
Age	0 - 16	1	2	3	4	5	_____ 41
	17 - 35	1	2	3	4	5	_____ 42
	36 - 60	1	2	3	4	5	_____ 43
	Over 60	1	2	3	4	5	_____ 44
11. OTHER ACCIDENTS (DROWNINGS, POISONINGS, ETC.)							
Age	0 - 16	1	2	3	4	5	_____ 45
	17 - 35	1	2	3	4	5	_____ 46
	36 - 60	1	2	3	4	5	_____ 47
	Over 60	1	2	3	4	5	_____ 48
12. TEENAGE PREGNANCIES							
Age	Under 11	1	2	3	4	5	_____ 49
	12 - 15	1	2	3	4	5	_____ 50
	16 - 18	1	2	3	4	5	_____ 51
	19 - 21	1	2	3	4	5	_____ 52

EXHIBIT V
(continued)

		Not a Problem	Very Minor Problem	Somewhat of a Problem	Major Problem	Very Severe Problem	FOR OFFICE USE ONLY
13. SEXUALLY TRANSMITTED DISEASES (V.D.)							
Age	0 - 16	1	2	3	4	5	_____ 53
	17 - 35	1	2	3	4	5	_____ 54
	36 - 60	1	2	3	4	5	_____ 55
	Over 60	1	2	3	4	5	_____ 56
14. LACK OF CHILDHOOD IMMUNIZATIONS							
Age	0 - 16	1	2	3	4	5	_____ 57
	17 - 35	1	2	3	4	5	_____ 58
	36 - 60	1	2	3	4	5	_____ 59
	Over 60	1	2	3	4	5	_____ 60
15. LACK OF PHYSICAL FITNESS							
Age	0 - 16	1	2	3	4	5	_____ 61
	17 - 35	1	2	3	4	5	_____ 62
	36 - 60	1	2	3	4	5	_____ 63
	Over 60	1	2	3	4	5	_____ 64
16. LACK OF NUTRITIONAL AWARENESS							
Age	0 - 16	1	2	3	4	5	_____ 65
	17 - 35	1	2	3	4	5	_____ 66
	36 - 60	1	2	3	4	5	_____ 67
	Over 60	1	2	3	4	5	_____ 68
17. LACK OF ENVIRONMENTAL AWARENESS							
Age	0 - 16	1	2	3	4	5	_____ 69
	17 - 35	1	2	3	4	5	_____ 70
	36 - 60	1	2	3	4	5	_____ 71
	Over 60	1	2	3	4	5	_____ 72
18. LACK OF STRESS MANAGEMENT							04 _ _ 1-4
Age	0 - 16	1	2	3	4	5	_____ 5
	17 - 35	1	2	3	4	5	_____ 6
	36 - 60	1	2	3	4	5	_____ 7
	Over 60	1	2	3	4	5	_____ 8
19. OTHER (SPECIFY) _____							_ _ 9-10
Age	0 - 16	1	2	3	4	5	_____ 11
	17 - 35	1	2	3	4	5	_____ 12
	36 - 60	1	2	3	4	5	_____ 13
	Over 60	1	2	3	4	5	_____ 14

EXHIBIT V
(continued)

COMMENTS:

EXHIBIT VI

BROWN COUNTY CITIZENS FOR HEALTH SURVEY RESULTS

What health and social problems do the Brown County leaders perceive? How do you see these problems distributed among the age groups of the population? The following summary is a result of your reaction to the questionnaire which you filled out in April 1980.

It was noted that the items which you ranked highest are as follows:

Alcoholism
Auto accidents
Colds and flu
Dental
Environmental awareness, lack of
Physical fitness
Nutrition, lack of
Smoking
Stress

It is interesting to note that all of the above items are involved with personal behaviors and life-styles.

Attached you will find the survey results. On the next page is a breakdown of respondents by sex, age and community affiliation. In the summaries of both Part One and Part Two, you will notice each health problem listed and the average score for each of the four age groups. The combined average of those four age groups is identified under "All Ages." We have circled what we consider to be high averages. We have also ranked the items under "All Ages." You might be interested in reviewing the following specific results:

- under "All Ages" the ranking of the health problems
- under the other four age groups the circled averages which reflect a high degree of perceived concern
- the "stars" to the right of the paper which indicate a perceived concern in all four age groups and a perceived major health problem

We will be happy to explain any concerns which you might have regarding this summary.

SUMMARY

BREAKDOWN OF RESPONDENTS

SEX	22 Female	
	17 Male	Printout Page 55
	39	
AGE	4 Under 20	
	13 20-39	
	11 40-59	Printout Page 56
	9 60+ and over	
	2 Missing	
	39	
GROUP	13 Community	
	3 Media	Printout Page 57
	2 Youth Organizations	
	3 Health Professional	
	3 Government	
	6 Education	
	4 Youth	
	5 Senior Citizens	
	39	

EXHIBIT VI CONT.

PART ONE: HEALTH PROBLEMS

	QUESTIONNAIRE NAME	COMPUTER NAME	ALL AGES	0-16 YRS. (1)[1]	17-35 YRS. (2)	36-60 YRS. (3)	OVER 60 (4)	
1	ARTHRITIS	ARTH /0	2.92[2]	1.47[3]	2.19	3.41	4.55	
2	HIGH BLOOD PRES.	HIBLOOD	2.78	1.38	2.19	3.53	4.08	
3	HEART DISEASE	HEART	2.90	1.50	2.16	3.53	4.43	
4a	LUNG CANCER	CANLUNG	2.61	1.34	2.11	3.26	3.61	
b	BREAST CANCER	CANBRES	2.56	1.19	2.31	3.47	3.27	
c	COLORECT. CANCER	CANCOL	2.65	1.39	1.97	3.29	3.58	
d	LEUKEMIA	CANLEUK	2.70	2.46	2.70	2.58	2.57	
e	SKIN CANCER	CANSKIN	2.47	1.45	2.30	2.87	3.17	
f	OTHER CANCER	CANOTH	2.74	1.69	2.31	3.17	3.61	
5	KIDNEY DISEASE	KIDNEY 7	3.03	2.11	2.69	3.24	3.66	
6	DIABETES	DIABETES 5	3.09	2.13	2.86	3.65	3.71	
7	CIRRHOSIS OF LIVER	CIRRHOS	2.54	1.23	2.31	3.31	3.36	
8	FOOT PROBLEMS	FOOT	2.79	2.11	2.42	2.97	3.43	
9	SIGHT PROBLEMS	SIGHT 3	3.30	2.42	2.85	3.64	4.23	
10	HEARING PROBLEMS	HEAR 8	3.02	1.89	2.36	3.47	4.39	
11	DENTAL	DENTAL 2	3.41	3.00	3.31	3.67	3.75	★
12	SKIN DISORDERS	SKIN	2.81	2.83	2.71	2.62	3.00	
13	PNEUMONIA	PNEUMON 8	3.02	2.83	2.56	2.69	3.64	
14	EMPHYSEMA	EMPHYSE	2.82	1.75	2.23	3.37	3.86	
15	BRONCHITIS	BRONCHI /0	2.92	2.65	2.64	2.97	3.16	
16	TUBERCULOSIS	TB	2.32	1.58	1.86	1.92	2.00	
17	ASTHMA	ASTHMA /0	2.92	2.70	2.80	2.80	2.91	
18	COLDS AND FLU	COLDFLU 1	3.49	3.68	3.30	3.32	3.65	★
19	ALLERGIES	ALLERGY 6	3.04	3.32	3.14	2.92	2.80	
20	SEX. TRANS. DISEASE	VD	2.66	2.87	3.62	2.46	1.54	

EXHIBIT VI CONT.

QUESTIONNAIRE NAME	COMPUTER NAME	ALL AGES	0-16 YRS. (1)	17-35 YRS. (2)	36-60 (3)	OVER 60 (4)
21 OBESITY	OBESE 4	3.29	2.71	3.72	3.76	3.39
(OMIT - NOT ENOUGH RESPONSE)	OTHELA OTHELB					

NOTES: The numbers are averages of responses on the following scale:

1) not a problem
2) very minor problem
3) somewhat of a problem
4) major problem
5) very severe problem

The numbers can be interpreted by the scale, i.e. respondents thought arthritis in the 0-16 yr. age group was about one-halfway between no problem and a very minor problem. (1.47).

...

1
The numbers 1 to 4 are the computer codes for those age categories. On the printout, Arth 1 refers to individuals 0-16 years old with arthritis.

2
Entries in the column are the mean scores divided by four for Arth, Hiblood, Heart, etc.

3
Entries in the arthritis row for columns one through four are the mean scores for the corresponding variables in the printout.

EXHIBIT VI CONT.

PART TWO: SOCIAL PROBLEMS

	QUESTIONNAIRE NAME	COMPUTER NAME		ALL AGES	0-16 YRS. (1)	17-35 YRS. (2)	36-60 YRS. (3)	OVER 60 (4)
1	OBESITY	FAT	10	3.16	2.69	3.25	3.56	3.20
2	SMOKING	SMOKE	1	3.91	3.67	4.21	3.90	3.53 ★
3	DRUG ABUSE	DRUG	8	3.17	3.79	3.95	2.78	2.11
4	ALCOHOLISM	BOOZE	3	3.61	3.32	4.03	3.90	3.22 ★
5	SUICIDE	SUICIDE		2.52	2.00	2.55	2.82	2.21
6	HOMICIDE	MURDER		2.37	1.95	2.58	2.47	1.86
7	RAPE	RAPE		2.36	2.22	2.72	2.29	1.83
8	MENTAL ILLNESS	MENTAL		3.00	2.33	2.97	3.20	3.35
9	AUTO ACCIDENTS	AUTOACC	6	3.26	3.03	3.78	3.22	3.00 ★
10	FARM-RELATED PROBLEMS	FARMACC		2.86	2.44	3.14	3.19	2.46
11	OTHER ACCIDENTS	OTHACC		2.54	2.63	2.68	2.37	2.08
12	TEENAGE PREG.	TEENPRG	8	3.17	1.65 (Under 11)	3.38 (12-15)	4.19 (16-18)	3.47 (18-21)
13	SEXUALLY-TRANS. DISEASES	VD SOC		2.64	2.78	3.54	2.51	1.60
14	LACK OF CHILDHOOD IMMUNIZATIONS	NOSHOT		2.43	2.42	2.22	2.08	2.00
15	LACK OF PHYSICAL FITNESS	NOFIT	5	3.28	2.63	3.08	3.57	3.87
16	LACK OF NUTRIT. AWARENESS	BADFOOD	2	3.64	3.84	3.51	3.41	3.78 ★
17	LACK OF ENVIRON. AWARENESS	BADENVR	4	3.30	3.24	3.28	3.31	3.39 ★
18	LACK OF STRESS MANAGEMENT	HISTRES	7	3.19	2.50	3.42	3.61	3.17
19	OTHER	(INSUFFICIENT DATA)						

WELLNESS

Good Health/Wellness is more than just the absence of disease symptoms. Each individual can attain a higher level of health through increased knowledge of his nutritional needs, a program of regular exercise, knowledge of ways to reduce stress, awareness of how the environment affects him, and an understanding that he is responsible for achieving his own peak level of health.

Sponsored by:
Brown Co. Citizens for Health

HIGH LEVEL WELLNESS

S elf responsibility
E xercise
N utritional awareness
S tress management
E nvironmental awareness

S ● E ● N ● S ● E ● ● O ● G R A M

TRY THE TONGUE TEST!

S E N S E - O - G R A M
TRY THE TONGUE TEST!

THE TONGUE MAP

Did you know that:

- **you have 9,000 taste buds on your tongue which tell you when a food is sweet, sour, salty or bitter.**
- **the taste buds on the side of the tongue tell you a food is salty.**

- **MOST AMERICANS CONSUME APPROX. 2 TEASPOONS OF SALT PER DAY- THE AVERAGE BODY NEEDS ONLY 1/8 TEASPOON.**
- **minimum levels of salt will keep your blood pressure at normal levels and your body operating at its best.**

TASTE IT BEFORE YOU SALT IT!

Please note both sides of cards

S E N S E - O - G R A M
TRY THE TONGUE TEST!

Did you know that: **THE TONGUE MAP**

- you have 9,000 taste buds on your tongue which tell you when a food is sweet, sour, salty or bitter.
- the taste buds on the side of the tongue tell you a food is salty.

- 1/8 OF A TEASPOON OF SALT WILL MEET THE AVERAGE PERSON'S DAILY SALT NEEDS.
- minimum levels of salt will keep your blood pressure at normal levels and your body operating at its best.

TASTE IT BEFORE YOU SALT IT!

WELLNESS

Good Health/Wellness is more than just the absence of disease symptoms. Each individual can attain a higher level of health through increased knowledge of his nutritional needs, a program of regular exercise, knowledge of ways to reduce stress, awareness of how the environment affects him, and an understanding that he is responsible for achieving his own peak level of health.

Sponsored by:
Brown Co. Citizens for Health

HIGH LEVEL WELLN:

S elf responsibility
E xercise
N utritional awareness
S tress management
E nvironmental awareness
●
O
●
G
R
A
M

TRY THE TONGUE TEST!

S E N S E - O - G R A M
TRY THE TONGUE TEST!

Did you know that:

- you have 9,000 taste buds on your tongue which tell you when a food is sweet, sour, salty or bitter.
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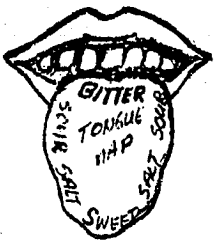
THE TONGUE MAP



- ALL FOODS HAVE SALT. READ LABELS-LOOK FOR Na, SODIUM, SODA OR SALT.
- minimum levels of salt will keep your blood pressure at normal levels and your body operating at its best.

TASTE IT BEFORE YOU SALT IT!

WELLNESS

Good Health/Wellness is more than just the absence of disease symptoms. Each individual can attain a higher level of health through increased knowledge of his nutritional needs, a program of regular exercise, knowledge of ways to reduce stress, awareness of how the environment affects him, and an understanding that he is responsible for achieving his own peak level of health.

Sponsored by:
Brown Co. Ci"zens for Health

HIGH LEVEL WELLNESS

S elf responsibility
E xercise
N utritional awareness
S tress management
E nvironmental awareness
●
O
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TRY THE TONGUE TEST!

Please note both sides of cards

S E N S E - O - G R A M
TRY THE TONGUE TEST!

Did you know that:

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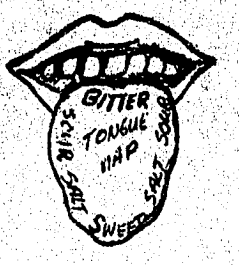
- the taste buds on the side of the tongue tell you a food is salty.

THE TONGUE MAP



- TASTE IS A MATTER OF HABIT. YOU LIKE WHAT YOU GET USED TO.
- minimum levels of salt will keep your blood pressure at normal levels and your body operating at its best.

TASTE IT BEFORE YOU SALT IT!

WELLNESS

Good Health/Wellness is more than just the absence of disease symptoms. Each individual can attain a higher level of health through increased knowledge of his nutritional needs, a program of regular exercise, knowledge of ways to reduce stress, awareness of how the environment affects him, and an understanding that he is responsible for achieving his own peak level of health.

Sponsored by:
Brown Co. Citizens for Health

HIGH LEVEL WELLNESS

S elf responsibility
E xercise
N utritional awareness
S tress management
E nvironmental awareness
●
O
●
G
R
A
M

TRY THE TONGUE TEST!

EXHIBIT VIII

BROWN COUNTY CITIZENS FOR HEALTH
QUESTIONNAIRE

1. How many SENSE-O-GRAMS have you received?

   0 ___ 1 ___ 2 ___ 3 ___ 4 ___ Don't know ___

2. When did you receive the SENSE-O-GRAMS? (check as many as apply)

   Aug. '80 ___ Sept. '80 ___ Oct. '80 ___ Nov. '80 ___ Dec. '80 ___

   Jan. '81 ___ Feb. '81 ___ Mar. '81 ___ Don't remember ___

3. How did you get the SENSE-O-GRAM(S) By mail ___ Senior Citizens Meeting ___

   School ___ Work ___ Food Co-op ___ Friend ___ Other (specify) _____

4. What was your first reaction to the SENSE-O-GRAM(S)?

   Interesting ___ Pretty ___ So-so ___ Dull ___ Ugly ___

5. Do you still have it/them in your possession? Yes ___ No ___ Not sure ___

6. If not, did you-- (please check one)

   ___ throw it/them away?
   ___ give it/them to someone else?
   ___ lose it/them?
   ___ other (specify) _____

7. Do you think cards (like the SENSE-O-GRAM) with different health messages on them are a good way for you to learn more about health? Yes ___ No ___ Please explain your answer.

8. What is your present daily salt intake from the salt shaker?

   ___ none
   ___ 1/8 of a teaspoon or less
   ___ up to 1/2 of a teaspoon
   ___ up to 3/4 of a teaspoon
   ___ up to 1 teaspoon
   ___ more than 1 teaspoon

9. Are you following a special diet prescribed for you by a doctor (for example-- diabetic diet)? Yes ___ No ___ If so, what type of diet? _____

10. Has the SENSE-O-GRAM(S) changed the amount of salt you use each day? Yes ___ No ___ If yes, please explain.

11. Please use the space below if you have any comments.