Dr. Jarvis, Arthritis & Folk Medicine



"As an organ of struggle the mind of man keeps his energy expending mechanism constantly under the <u>stress</u> of fear, worry, and anxiety. As a result, a group of clinical conditions peculiar to civilized man have appeared, which might be called energy diseases.

The heart of modern man is affected profoundly be the fretting and frustrations peculiar to his way of life--a pattern in which he works physically, mentally, and emotionally all day and worries at night. Man is a combat animal and will probably always be one. It is this combat instinct that makes business and professional competition attractive to him. The way of living he has created will not wreck him, however, if he learns how to control the energy expending mechanism of his body.

You may ask, "Why should an individual with arthritis be interested in this mechanism?" He should be interested because conditions in his life may be responsible for activating the energy expending mechanism, and he ought to know what happens in the body in relation to arthritis when that activation occurs.

He should know, for example, that when a change in the reaction of the blood takes place, its normal faintly alkaline reaction increases until it becomes hyper alkaline. Then the blood calcium is precipitated, just as it is in the teakettle when water boils, and precipitated calcium forms a deposit, just as it does on the bottom of the teakettle.

This free calcium in the blood makes the body tissues tough, interferes with the normal formation of tissue juices, makes it more difficult for the heart to circulate the blood, and brings about a deposit of calcium in the blood vessel walls. When the body holds all the precipitated calcium possible it spills over into the bursae and the joints.

The object of treatment is to throw the deposited calcium into solution again, thus relieving joints and bursae of the precipitated calcium. Dairy cows in pasture achieve this, as we have seen, by selecting only acid reaction vegetation, and native Vermonters do it by the daily use of apple cider vinegar on their food and by taking honey. By using the vinegar-and-honey combination the daily food intake is made acid in reaction before it enters the mouth, in accordance with nature's plan. This prevents calcium from precipitating in the body. One reason why these Vermonters live so long is their ability to solve the calcium problem. They keep body tissues free from deposits in places where no deposits should occur."

Excerpt from A Special Report (understanding arthritis as an energy disease) by Dr. D.C. Jarvis

The Two Blood Vessel Beds



Dr. D. C. Jarvis

IT IS HELPFUL to someone who has arthritis if he has a working knowledge of the two blood vessel beds in the body. Knowledge of them came to folk medicine as Vermont farmers, slaughtering their animals for market and studying the color of the meat and the whiteness of the tallow, came to the conclusion that there was not enough blood in the animal body to fill all the blood vessels at the same time.

They taught young Vermonters, therefore, that the human body has three floors. The ground floor contains the digestive tract and other abdominal organs. The second holds the lungs and heart; while the top floor shelters the brain. and the sense of smell, sight, and hearing which keep an individual in touch with his environment.

In these three floors are two beds made up of blood vessels of various sizes, from the largest to the smallest. One of these beds is located on the ground floor, the abdomen, while the other is on the second and top floors of the body.

The young Vermonter is also taught that there are three trees in the body. One is the digestive tree, with its roots in the stomach. The second is the blood vessel tree, with its roots in the heart; while the third is the nerve tree, whose roots are in the brain. In order to nourish these trees suitably it is necessary that the blood mass in the body be able to shift from one blood vessel bed to the other, changing back and forth according to the nutritional needs of the three trees, and as the body needs may require, whether the need is fight or flight or the normal activity of storing reserves against the day of need.

The blood vessel bed on the second and top floors supplies such tissues as heart, lungs, central nervous system, eyes, ears, the lining of the nose and throat, and the muscles of the arms, legs, and body trunk. On the ground floor the bed there supplies skin, stomach, intestines, liver, spleen, and kidneys. Muscles, brain, and lungs comprise what we call the blood lakes of the second and top floors, while the ground floor lakes are the skin, liver, and spleen.

When food is taken and digestion and absorption are necessary the blood mass in the body shifts from the second and top floor blood vessel bed to the ground floor bed. As it leaves the upper floors the diameter of all the tiny blood vessels, called capillaries, in the bed are lessened in size. This means that less blood carrying food material and oxygen, which body cells need to carry on their vital activity, reach these cells.

As a result of the lessened blood supply the body cells supplied by the second and top floor bed develop a nutritional need which is supplied by shifting the blood mass from the ground floor upward, as soon as it is possible to do so. When the mass leaves the ground floor the diameter of the capillaries is lessened, and in time the cells in this bed develop a nutritional need of their own, which is supplied in turn by a shift of the blood mass back to the ground floor.

We have, then, a balance existing between the two beds.

On the flexibility of this balance depends its usefulness. The increase and decrease in the size of the capillaries is changing constantly from one bed to another.

Shifting of the blood mass permits the maintenance of a higher level of body cell activity in one or the other of the beds, depending on whether body demands are for muscular work or for digestive uses. But if the shift of the mass does not take place readily, in accordance with body cell needs, the cells in one bed or the other rebel against the uncongenial environment which fails to furnish them with nourishment.

The result is that the individual becomes body conscious and recognizes that a certain part of the body is not behaving as it normally should. In nervously unstable people the balance between the beds is of great importance; they make the shift of the blood mass frequently and suddenly.

All our lives we must deal with a rhythm of increase and decrease in the size of the capillaries in these two vascular beds. Fundamentally the rhythm depends on the environmental factors present. When you shift the human motor into high gear you shift your blood mass from the ground floor bed to the second and top floor bed, in order to organize for aggressive action. Going into low gear the shift of blood is from top to bottom, to organize the body for peace and quiet and the building of reserves.

As a result of present-day stress and strain and the processing of many foods that we eat there is often an habitual constriction of the capillaries on the ground floor bed, and an increase in capillary size on the upper levels. Outward evidence of the blood mass's fixation on the second and top floor bed is the presence of a continued high blood pressure reading.

To break this fixation and restore a working balance between the upper and lower levels so that a greater part of the blood mass will shift back and forth as needed, Vermont folk medicine first prescribes a high natural carbohydrate food intake-that is, fruits, berries, leafy vegetables, root vegetables and a low protein intake represented by milk, eggs, cheese, meat, fish, poultry, and seafood.

With this done, four simple remedies are prescribed. They are apple cider vinegar, honey, **Lugol's Solution of Iodine**, and kelp tablets. In combination they have a long record of success in breaking up the habit of locking the blood mass in the second and top floor blood vessel beds.

The Treatment of Arthritis Dr. D. C. Jarvis

To conclude, let me summarize what Vermont folk medicine prescribes for the treatment of arthritis, based on the trialand-error method developed over two centuries. The treatment has been considerably simplified with time, and today consists of the following five steps:

1. Two teaspoonfuls of apple cider vinegar and two of honey in a glass of water, taken at each meal. If, for any reason, this mixture is not accepted by the stomach at mealtimes it may be taken between meals midmorning, mid afternoon, or evening.

2. On Monday, ""Wednesday, and Friday of each week, at one meal on each of these days, a drop of Lugol's solution of iodine is added to the glass of water containing the vinegar-and-honey solution.

3. One Kelp tablet tablet is taken at breakfast or at all three meals, whichever gives the best results.

4. A solution made from a half cup of vinegar and three cups of water is used to soak the hands and feet. It is applied by a cloth wrung out of this comfortably hot solution to other joints.

5. Biologic food selection is followed every day. This removes wheat foods, wheat cereals, white sugar, citrus fruits and their juices, and muscle meats like beef, lamb, and pork from the daily food intake. In the majority of individuals these foods produce an unwanted alkaline urine reaction when taken on rising in the morning.

Vermont folk medicine uses the same treatment for rheumatoid^{'''} arthritis, osteoarthritis, gout, and bursitis. It does not differentiate between these but considers them as being manifestations of arthritis which are favorably influenced by the same treatment.

If one studies arthritis many years from the Vermont folk medicine viewpoint in time he comes to recognize it as an energy disease, due to a permanent organization of the energy expending mechanism of the body. All the folk medicine remedies used in the treatment of arthritis are those that end the permanent activity of the energy expending mechanism and bring peace and quiet to the body.

By favorably influencing the nervous, chemical, and endocrine parts of the energy expending mechanism the human motor is shifted from high to low gear. That is not only the essential approach to the treatment of arthritis, but the key to every man's good health.

Our Changing External Environment

Excerpt From Arthritis and Folk Medicine

Dr. D.C. Jarvis

Also by Dr. Jarvis

WE ARE BORN with an elaborate equipment for living. In many respects this equipment is fixed; a baby will never have more than two eyes and one nose. But in many other respects considerable leeway exists at birth for the modification of this constitutional equipment.

The equipment the infant brings with it at birth has been determined in important ways by the hereditary, physical, chemical, endocrine, and nervous impulses to which it has, already been subjected. Its further development and health are affected at every turn by its own reaction to different factors in its environment.

Human beings, we may assume, have never succeeded in establishing a way of living in which adaptation to environment has not been a problem that must be solved. This assumption is implied in the stock phrases of the biologist: "the struggle for existence" and "the survival of the fittest."

There are so many factors involved in adaptation to environment that a perfect individual adjustment is perhaps beyond human attainment. All we can hope for is to secure as nearly as possible a satisfactory working adjustment to environment that will allow each individual to live every day with some degree of pleasure and profit.

We do not live in a static world, as everyone knows. Our environment is constantly changing, with increasing speed as the decades of this century go by. Horse-and-buggy days now seem to us in the distant past, and long hours of laborious handwork have given way to mechanical gadgets which make living easier both within and without the home. Vacuum cleaners have replaced brooms. Automatic washing machines do the weekly wash better and quicker than old-fashioned tub and washboard. Electric and gas stoves eliminate the backbreaking work of making ready a woodpile for the winter months. Thermostatically controlled oil furnaces banish coal and ashes. Radio and television provide armchair entertainment.

It is becoming increasingly apparent that we live in a period of unusually rapid changes in every field- economic, political, social, and scientific. The tempo of living has speeded up correspondingly, making increased demands on the individual. We are faced with the need of a daily adaptation, both mental and physical, to an environment of ever-increasing complexity.

Today a baby is born into an environment that bears little resemblance to the one that molded the bodies and minds of our ancestors for centuries. Yet the change has taken place almost without our noticing it or realizing its importance. Any modification in environment, however, inevitably and profoundly disturbs all living beings. "We have come a long way since the horse-and-buggy days, when we traveled slowly but safely along dusty roads, enjoying the scenery with the assurance that the horse would take us home.

Our manner of living has changed, too, simultaneously with the change in environment. Each of us does a great many more things than his parents and grandparents ever did. We take part in many more events, and every day we come in contact with more people. Quiet, unemployed moments are exceptional during the day.

In this modern environment of ours the demands on the physical side of our make-up have changed. It is a common observation how little it is necessary for us to walk these days, even when the distance is short. A good many people use their automobiles to ride only a few blocks, and jet planes whisk us over long distances in fantastically brief periods of time. Such body exercise, familiar to countless generations, as walking and running, tilling the land, and manual labor in rain, sun, wind, cold, and heat, all these have diminished greatly and in fact have virtually disappeared among our great urban populations.

These profound changes have occurred within a relatively short time span, and so it becomes necessary now to evaluate just how much the substitution of a new mode of existence for the old one influences the chemistry and physiology of the human body.

Every living thing depends intimately on its surroundings and adapts itself to any modification of these surroundings by an appropriate change. The problem, then, is to determine in what manner we have been influenced by the mode of life, the customs, the daily food intake, and the education imposed on us by our present civilization. We must, of necessity, gain a much better understanding of ourselves by doing so, and learn how better to adapt ourselves to our present environment.

The human body is a complex structure made up of many independent cells. In order to bring the whole to any degree of efficiency it is necessary to correlate the action of these cells. That is accomplished by means of hereditary control, chemical changes, endocrine gland secretion, nerve impulses, and our daily food intake.

The body lives in an ever-changing environment which permits rest, work, and acts of defense. These three states make different demands on the factors that correlate cell action. Acts of defense-closing the eyelids at the approach of dust, drawing the hand away from fire, the contraction of muscles for escape from danger-depend upon rapid and correlated action.

At present the environmental load our bodies carry includes food, water supply, weather changes, respiratory hazards, prolonged mental work, insufficient sleep, emotional unrest, unproductive worry, menstruation, accident, industrial injury, micro-organisms, viruses, insects, parasites, drugs, and allergens which produce an allergic reaction.

Health is a state of body and mind resulting from the successful adjustment of the body to environmental factors. Sickness is a departure from health, and is essentially the body's failure to adjust itself satisfactorily to environmental factors.

Between health and sickness there is a pre-sickness zone in which the individual realizes that all is not well. In this zone the body is failing to maintain a satisfactory adjustment to environment, and if that adjustment is not made, because the individual no longer knows how to make it, then he must adjust or be destroyed, in accordance with nature's law. For destructive purposes nature possesses harmful microorganisms, viruses, and such degenerative diseases as heart ailments and cancer.

As a necessary consequence of failure to adjust there must be an overcoming of the natural elasticity of the body functions beyond the margin of safety. That margin can be illustrated by the buffers of the blood, which keep the blood reaction stable within narrow limits during the course of normal physiological functions.

When the limits of natural elasticity of body functions have been passed, however, changes of a more or less permanent nature will come about, which will be hidden temporarily by a compensatory mechanism permitting the body to

function, seemingly without flaw, perhaps, but nevertheless-: with a certain loss of elasticity. This process may well be continuous, so that in time even the margin of compensation is reached, and for the first time symptoms will show themselves. The margin of safety may be lessened from the very beginning of life by the racial, family, chemical, and anatomical patterns the individual inherits.

The ease with which the body carries the environmental load can be determined by observing the ease with which it recovers from fatigue. Recovery may be rapid, slow, or impossible because of chronic fatigue.

When the environmental load becomes too great to be carried successfully the individual becomes conscious of it by changes in his normal state of well-being that tell him something is wrong. At that point there may be no symptoms present which even a thoroughly competent physician could recognize. But if the situation continues unchecked, in time the symptoms appear which any doctor will recognize readily. That is the beginning of disease.

A business or professional man regards his work as in dispensable to the success of his life, and recoils from am thing he feels might take him away from it. In the pursuit of his career he regards it as possibly fatal to everything he has worked for if he must take time out to regain his health For him the path is foreordained-an apprenticeship during which his executive ability ripens, and then a fulfillment of his talents at a time when he has still enough of life remaining to enjoy his reward. If he is to remain undefeated, however, he must be taught how to be sure of his health so he may practice the virtue of endurance. That means he must learn how to adjust himself to his environment, and be able to carry the environmental load successfully.

As I have pointed out, every human body has fighting equipment that enables it to organize for aggressive action either mental or physical. This organization was intended to be temporary, but our modern environment has made it permanent. When the body organizes for aggressive action, nervous, chemical, and endocrine gland changes take place temporarily, but if the organization becomes permanent the changes are no longer desirable.

"Whatever environment an individual finds himself in determines how the body must organize itself. If he lives close to the soil the demands will naturally be primarily on his muscles, and, conversely, if he is in business or a profession his brain will be called upon most.

According to the Bible God created man in His own image-a perfect being. After the creation he was placed in a garden where fruits, berries, edible leaves and roots, and honey were provided as his food. These were all acid in reaction and rich in minerals. The body that was designed for these primitive conditions has been subjected to the pressures of an utterly different environment in our time, but it contains within it still the ability to adjust itself if we would only follow the original plan for daily food intake.

If man fails to consume the needed acids and minerals or processes his food so it is lacking in these elements he becomes sick eventually. He is maladjusted.

Nature has established a wisely directed order for the benefit of man and beast, but in his ignorance man tries to rearrange things. wild animals, who know better, follow the order and never try to rearrange it. We have to learn that we can live scientifically, yet in doing so follow nature's order.

But let us see what else happens to us in the modern environment which is so far from natural law. when, for example, the sympathetic division of the autonomic nervous system is organized to arouse the body for aggressive action other changes take place in the body. The sympathetic division controls the alkalinity of the blood, so that when it is activated, naturally there is an increase of alkalinity. We can see that process reflected in the change of the norm2-1 acid reaction of the urine to alkaline.

Then, as we have already discovered, since calcium is precipitated in an alkaline medium, increased blood alkalinity produces a calcium effect on the walls of the body cells so that permeability of the cell wall decreases, preventing food material and oxygen from entering. The decrease shuts down the cell factory, which manufactures heat, energy, carbonic acid, lactic acid, phosphoric and sulphuric acid. This the action of the sympathetic division of the autonomic nervous system and of the adrenal glands cuts off the vital activity of the body cells.

In modern life new factors have appeared in our environment which convert this emergency arousal of the sympathetic division and the adrenal glands into a permanent organization which it was never intended to be. These are the factors:

- 1. Wheat foods and wheat cereals.
- 2. White sugar.

3. Pasteurized milk, which changes the normal acid reaction as it comes from a healthy cow to an alkaline reaction not in \cdot tended by nature.

4. Muscle meats like beef, lamb, and pork, which modern refrigeration has made available for food every day.

- 5. Citrus fruits and their juices transported to places where they do not grow naturally.
- 6. Mild or severe cold.
- 7. Prolonged physical work.
- 8. Prolonged mental work, made possible by artificial lighting:
- 9. Emotional upsets.
- 10. Grief.
- 11. Unproductive worry caused by the necessity to meet economic needs.
- 12. Financial upsets.
- 13. Social conflicts.
- 14. Family maladjustments.
- 15. Nervous tension states.
- 16. Cigarette smoking.
- 17. 'Weather changes.
- 18. Drinking water rich in calcium.
- 19. Processed foods.

The permanent emergency organization produced by these factors, singly or in various combinations, causes a marked change in an individual's character. Irritability, failure to correlate decision and action, inability to engage in swift action, chronic fatigue-these are some of the symptoms.

Further, the nature of his food intake begins to change.

He develops a sweet tooth to supply the liver with the sugar which an overactive sympathetic division demands must be thrown into the blood stream to suffuse the blood. There is a decrease in the desire for vegetables, fruits and natural acid drinks made from fruits, and vegetable juices, with the result that the environmental factors nature depended on to terminate the emergency action of the sympathetic division and adrenal glands are no longer available to the body.

With that failure the permanent organization is firmly established and makes its presence known by the following symptoms:

- 1. There is a loss of the will to win.
- 2. Loss of physical and mental endurance takes place.
- 3. Irritability appears, and the individual becomes unsocial.
- 4. The face is unusually pale, suggesting the possible presence of anemia.
- 5. Sensitivity to cold.

- 6. Feet, hands, and nose are usually cold.
- 7. There may be increased frequency of urination.
- 8. The nose is inclined to be wet at times, and there may be an increased amount of moisture in the eyes.
- 9. Postnasal dripping is generally present.
- 10. There may be seepage from the Para nasal sinuses.
- 11. Belching of gas from the stomach and heartburn are often present.
- 12. Digestion is weakened.
- 13. Constipation is the rule.
- 14. The systolic blood pressure is likely to be increased.
- 15. A dry skin is the rule.

16. There is a tendency to thickened places on the skin, as shown by the presence of corns and calluses on the feet.

An individual with a permanent organization of the emergency mechanism in the body may not have all these changes present, but a majority of them will be.

If you want to know whether your body is permanently organized for emergency ask yourself these questions:

1. Do you sleep well at night? Whether your emergency equipment's over activity is temporary or permanent, sleep will not come when you want it. You will not fall asleep easily, and when you do it will not be sound, and will not bring you to the beginning of a new day refreshed as you would be by normal sleep.

2. Is your appetite good? One of the results of over activity is depression of digestive activities, and with this goes a lessening or failure of appetite.

3. Are you constipated? Normal movement of the intestinal tract is slowed when emergency equipment is dominant.

4. Have you gained weight recently? In the emergency state your waistline measurement is likely to increase as time passes.

If you answer yes to these questions there is certainly temporary or permanent organization of the emergency equipment in the body. It can be terminated by taking two teaspoonful's of apple cider vinegar and two teaspoonful's' honey in a glass of water at each meal. One must, in brief know how to restore the body physiology and chemistry to normal. I have learned how to do this from Vermont fol medicine. I have summarized the prescription, but let me spell it out a little more carefully now.

Besides the vinegar-and-honey treatment, we must return to natural foods. White flour foods and white sugar must be removed from the daily food intake because they are highly refined, which removes the minerals the body depends on to rebuild and maintain body tissues. 'Without these needed minerals the body deteriorates, like a piece of land that has lost its fertility and run down.

A man's inheritance may carry him to fifty years of age, but after that it is up to him to rebuild his body and maintain it successfully during the later years if he wishes to come to the sunset years with good eyesight, good hearing, mental and physical vigor, and no appearance of senility.

Native Vermonters living close to the soil refer to white flour, white sugar, packaged cereals, and processed foods as "civilized foods." They exchange white flour bread for rye or corn bread and other rye and corn foods. Corn oil is used in cooking. This oil helps allergic conditions.

I learned from Vermont folk medicine that a child with asthma who wheezes at bedtime will stop and get a good night's sleep if he gets a tablespoonful of corn oil. In an adult it decreases the wheezing fifty per cent if taken at bedtime. Corn oil, furthermore, if applied to the eyelids at bedtime as one applies an ointment to the edge of the eyelids, will favorably influence granulation.

For these and other reasons corn oil is used in cooking because it contains several unsaturated fatty acids which help to terminate the organization of the emergency organizing equipment.

White sugar is exchanged for honey to sweeten foods, because it acts as a sedative and has a mild laxative action. Muscle meats like beef, lamb, and pork are taken only once a week because they stimulate the emergency equipment. Meat is exchanged for eggs, cheese, fish and other seafood. Yogurt and cottage cheese are also valuable foods to help terminate the emergency situation. Citrus fruits and their juices must be removed from the daily intake if you live in the northern part of the United States.

Heat changes the chemistry of the body, which is shown by the presence of an alkaline urine reaction before taking a hot bath and the presence of an acid reaction afterward. In Vermont, cold produces an alkaline urine reaction and citrus fruits produce the same thing in the majority of natives. For that reason we exchange citrus fruits and their juices fo fruits that are grown in cold climates, like apples, grapes and cranberries. All these grow wild in Vermont.

As I study the foods native Vermonters remove from their intake I have learned that the majority of these foods shift the normal acid urine reaction to alkaline, which is evidence that they activate the emergency organizing equipment. Instead of them the Vermonters use leafy and root vegetables berries, apples, grapes and cranberries, honey, nuts, fish game, and poultry.

To these may be added a food supplement in the form of kelp tablets. I learned about the use of kelp from Professor Cavanaugh, of Cornell, who did a great deal of research on it. Because of its mineral and vitamin content derived for the ocean it represents an ideal food supplement.

The potassium in honey, kelp, apple cider vinegar, vegetables, fruits and berries will depress an overactive emergency organizing equipment and lessen its activity so that it will be available only when needed. Two teaspoonful's of apple cider vinegar and two of honey in a glass of water, taken at each meal or between meals, will also help a great deal to bring about this happy and healthy result.



" I believe the doctor of the future will be a teacher as well as a physician. His real job will be to teach people how to be healthy." <u>Dr. D.C. Jarvis</u>

The Influence of Weather Changes on Health

Our Changing External Environment Dr. D.C. Jarvis

What do the twenty-three storm tracks that cross Vermont on their way to the Atlantic Ocean do to those of us who live in Vermont? The weather changes every few days because of the storm tracks that pass over Vermont. During the past two hundred years Vermonters have learned how to adjust their body to these frequent weather changes. William F. Petersen, M.D. of Chicago, Illinois taught me how to use the story of an Indian in a canoe in teaching the succeeding generations of Vermonters the influences of these frequent weather changes on the human body.

Let us put an Indian in a canoe and let him float about on a calm sea. The Indian was not designed to live on the water, but he invented the canoe and he built it with simple tools devised by his brain and he made use of simple materials provided in his environment. As long as the sea is calm he will get along very well. There is little work and little strain ... even a sick Indian or and old Indian can survive. Now we will add wind and weather to the picture. Our Indian must now do real work. If the canoe is poor or the paddle breaks, he will be in trouble. Automatically he must balance and coordinate. Some of this he does by conscious effort and some of the movements are an action produced by the transmission of an impulse which creates action independently without a conscious effort on the part of the individual. We observe this happening with involuntary winking when the eye is threatened. In such a seemingly simple process an immense number of different tasks in the body of the Indian must be completed. When some muscles contract, others must relax. The blood vessels in the working muscles must at the same time dilate and the heart must pump more blood.

But while the heart is doing this the liver must give up sugar so that the muscles can have more energy. In the meantime the lungs must increase their breathing rate in order to remove accumulating carbon dioxide from the body. At the same time there is water loss from the lungs and skin and more water must flow from the tissues into the blood. It is a smooth and endless, uninterrupted chain of events as adjustments follow, adjustments.

Of course, our Indian in the canoe cannot keep up the pace indefinitely. Sooner or later he will be fatigued, either because his stores of energy will be exhausted or waste products will accumulate. An indefinite strain means an ultimate collapse.

Instead of the moderate strain of a stiff breeze and a choppy sea let us put our Indian and his canoe through a gale and some waves that are really big. Now life will depend wholly on his strength and on the quality of his equipment. But if in addition there is some sudden increase in the environmental influence, he may be swamped. Even if he isn't the canoe may take in water. Then it will not handle so readily; a lesser strain that may now be added may provide the final blow that wrecks him.

You and I are not navigating canoes nor trying to successfully survive crests and troughs in a turbulent sea. But actually those of us who live in Vermont and who live in regions of the storm tracks are constantly doing the same thing day in and day out as we have to survive the air waves of the storm tracks that are constantly passing over us.

Our private birch-bark canoes, that is, our bodies during the cold months of January, February, March, and April have to adjust to swings of temperature of more than fifty degrees in the summer. Such high air waves come so fast and furious during January, February, March and April in Vermont that it requires good airmanship and a strong body to bring us through on an even keel.