

New PERSPECTIVES

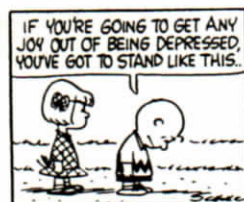
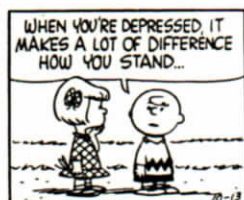
A Quarterly Bulletin about Roling and Somatic Awareness

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Exercise

by Ida P. Rolf, PhD.

Ida P. Rolf (1896–1979) was the creator of Roling and founder of the Rolf Institute of Structural Integration in Boulder, Colorado.



Welcome!

Welcome to *New Perspectives*. This is an exciting moment for me. I have wanted to publish this kind of resource for a long time. I hope you will find the articles informative, useful and provocative. Thanks to all of you who sent in suggestions for future topics. Over time I hope to include most of them. I welcome your continued letters and comments about *New Perspectives*.

David Laden

Reams of paper are covered these days in honor of one of our newer American Gods—Physical Fitness. Unfortunately, much of this paper is wasted because the concepts advanced are misconceptions, misunderstandings of the actual physical structure of bodies. This lack of understanding exists on the levels of both professional and lay devotees.

The major problem lies in the almost universal assumption that “exercise is good, and more exercise is better.” This idea has certain elements of truth, most people *do* feel better when they exercise. The reason behind this is simple. Most people are aware that the most obvious function of the body fluids is to supply the cells with oxygen and other food stuffs as well as the enzymes, hormones, etc. necessary for functioning. Of these oxygen is, of course, the material which becomes the most urgent if its level in the fluids starts to fall. But humans in this culture do not get the type of vigorous movement which characterized the daily living of our ancestors. Consequently their tissues fail to receive the amount of oxygen needed for adequate metabolic functioning. This can be better recognized through realizing that vigorous movement is literally the pump which forces oxygen-laden blood and lymph fluids through tissues. Therefore even though adequate breathing permits the blood to be well oxygenated, if this fluid is not pumped through the tissues where the aeration is needed, inducing an adequate exchange of materials, the individual may be seen to be suffering from an anoxia (insufficient supply of

oxygen within the tissues). Thus it is easy to understand that irrespective of the condition or the vital level of the body, most people “feel better” for exercise, and particularly for outdoor exercise. However, as soon as we go further than this consideration of forcing fluid exchange, we run into the complications which the skin hides from view in the average body.

People are unaware that the skin is like a wrapping paper enclosing and concealing a great variety of complicated mechanical situations. In terms of exercise the system to be looked at most closely is the myofascial, popularly called the muscular system. The average person fails to realize that the flesh of a muscular body area—for example, the upper arm or upper leg—is not homogeneous, but is composed of many muscles, each having a function slightly different from, in spite of its contiguity to, its neighbor. Not only is this so, but these individual muscles are in turn aggregates of fibres, and the fibres are subject to individual traumatic disturbance, to individual degenerative regressions, to individual differences in rate of metabolic exchange and rate of rehabilitation when exhausted. This variance in function actually reflects differences in rates of fluid flow through the individual fibres. In other words, this differing degree of function bears witness to the presence or absence, in individual fibres or groups of fibres, of relative barriers which retard what would be a speed of flow normal for that body.

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What does this word "barrier" mean in this connotation? One of the simplest "barriers" to a muscular unit can be seen and felt in the infiltration of scar tissue into muscular tissue. This is an experience we all have, so commonplace in fact that it hardly needs description: the accident which cuts or destroys flesh. Some people fail to realize that for the most part "flesh" as distinguished from "organs" or "organ-meat" consists of muscles together with their individual envelopes, technically called "fascia". When this material is damaged, particularly if there is any impediment to healing, e.g. a slight infection occurs, the wound is too wide, or too deep, or it has not been cleaned thoroughly, or closed by appropriate stitches; the healing process may be slowed to the point where the area becomes permanently infiltrated with a less elastic connective tissue, popularly called scar tissue. This holds the broken ends together, but it also effectively prevents the free stretch of the original, more resilient and more highly oxygenated tissue. In so doing it makes it necessary for a movement that requires a stretching of the muscle in question to be transmitted *around* rather than *through* the scar tissue. Needless to say, this is a much less efficient system and needs a longer time to accomplish the movement even if it does succeed in substituting for it effectively. In many instances it displaces the muscular movement and requires work of an adjacent muscular structure which may not be as well suited to the particular task.

Passing on to the next, more complicated, level of "barrier formation" or "scarring", injury may occur in tissue which is not of the particular traumatic type. Sometimes this happens during illnesses, many of which center in localized areas. For example, many illnesses are characterized by local inflammation. It is part of the natural course of healing, especially in internal organs, that these areas exude fluids which under certain situations do not entirely disappear. Instead they seem to "dry up", leaving a residue which causes the adjacent structures to "adhere" to one another. The situation which particularly interests us here is the one which occurs in muscle tissue. Few laymen realize that what they refer to as "muscle tissue" actually consists grossly of two different types of material. The inner contents of the muscular "cell" is pulpy, rather like, though somewhat harder than the "pulp" of an orange. Like the orange pulp it is enveloped in a different type of material, the fascial, or connective tissue. It is the last named, the connective tissue, that gives the body its shape and staying power, whereas the "pulp" of the muscle takes care of the life, the vital fluid exchange and chemical transformation of the cell. To function adequately a muscle cell must be in condition to permit a rapid change of water content (hydration). This is the chemical expression of what we can see physically as a change in shape and size. In other words, on this visual level, it must be able to stretch (becoming thinner) or to contract (becoming thicker). It is obvious that not merely must the muscle pulp be able to accomplish such rapid-fire change, but the enveloping connective tissue must also be able to shift to permit this. The actual chemical and colloidal changes occurring in this process are complicated and still not fully understood.

Fortunately, we need not concern ourselves with the more obscure chemical details. However, it is obvious that if the muscular pulp increases or

changes in bulk, the envelope of connective tissue has to adjust. Much of this adjustment is accomplished less by a lengthening of the connective tissue than by a sliding into a slightly different position. It is only as these muscles slide over one another that easy, graceful, sophisticated movement is possible. However, when a fascial envelope adheres to a neighboring structure, movement is impeded. In this case, to accomplish the desired movement, both structures must participate. At this point, they are no longer able to move freely: each must, to a certain degree, follow the movement of the neighbor. As the situation worsens, as the muscles no longer move freely, their nutrition worsens, because the normal "pumping" action of movement is interfered with. Little by little slow degeneration of the tissue sets in, the muscle or tendon becomes gristle, and this rather typical picture of muscle anoxia becomes permanent. At this stage, or even long before, the individual is complaining, he is no longer "supple"; he "doesn't know what's the matter"; his knee (or his elbow or his finger) "hurts when he moves it". He must have a "touch of arthritis".

At this point our friend decides to "take some exercise". What happens? More oxygen is carried to the areas which are free to receive it. Our friend "feels better, more alive". But the local muscular situation, described above in detail, cannot get the benefit of this oxygen. In the area which "feels like gristle" fluid is not passing freely.

Sometimes these areas become walled off with a sac of connective tissue, in response to this irritation. Such responses by connective tissue to local irritation were artificially produced and described in detail as well as pictured, in Selye's book *The Stress of Life*, (McGraw-Hill, 1962). These degenerative areas can be felt with the fingers, lying within muscular tissues. They may be the size of a kernel of wheat, or of a pea, or of a walnut. But

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irrespective of size, they prevent and deflect the free flow of movement. In so doing, they interfere with the fluid flow of the immediately adjacent muscle fibres, since they modify the movement which stimulates the flow. This in turn contributes to a larger area of improperly nourished and therefore inadequately functioning (less elastic) muscle tissue.

This vicious circle gradually widens. As it does, it begins to affect the larger body balances. All gross movement, either the movement of the body as a whole in space, or the movement of individual limbs is the resultant of the balancing of at least two opposing muscle groups. Technically these are called "antagonists". As one of the pair becomes less adequate, less able to stretch symmetrically within its own little area of functioning, it becomes less adequate to balance its antagonist. As a result the gross movement is no longer symmetrical, no longer fully controlled, no longer "easy". The situation may even degenerate to the point where certain movements "hurt".

Movements about joints also reflect the imbalance of the muscle pulls. A joint is commonly considered to consist of bony surfaces which "hinge". They might more realistically be seen as the balancing of muscle and tendon pulls, the related bony surfaces merely bending to permit these pulls to act. The action is no longer adequate. Muscle pulls which constitute joint movement become asymmetric. Little by little the joint loses its elasticity. Finally the day comes when a demand is made on the joint which is greater than usual. The joint "gives". According to where it is located in the body, the man himself may be immobilized to a greater or to a lesser degree, and his pain is more or less acute. Such a joint is not able, spontaneously, to restore either itself or its motion fully and adequately. Fortunately an understanding of this principle of balance does offer

appropriate help and functioning and it can be restored in a major fashion. But the body, unaided, cannot do it.

If this analysis of the progressive disordering and disorganization of the body actually represents the facts, it follows that "exercise" as such does not repair the situation. The demand made by the exercise is met, within an unbalanced body, by asymmetric response. The muscles which are still functioning well, profit by the increased fluid flow. Increased flow means enhanced oxidation, and improved nutrition as a result of the activity. But the muscles within which patterns of limitation and interference occur are not able to profit by it. The circulation cannot flow freely through an area of gristle. Therefore the imbalance increases. The fit muscles become

stronger, the weaker muscles become still more unable to cope. And since health, as such, is basically a balance, it is obvious that the situation, as a whole, has worsened. The strain within the body has increased. This may be in spite of the man's own comment to the effect, "I played basketball for three hours this morning. My, I feel fine."

What is the solution? What can be done about this? Fortunately there are positive answers. They may be summed up in one sentence. Exercise can be, and is, of inestimable benefit if a body is in a state of approximate muscular balance. What we ordinarily refer to as "posture": is the outward and visible index of muscular balance. The body which is sway-backed, knock-kneed, bow-legged, hump-shouldered, etc. is

*continued on page 4***Editor's Notes****Exercise after Rolwing**

People often ask me what type of exercises will help them maintain and evolve the balance, relaxation and alignment they have gained through Rolwing. There are several forms of "exercise" I highly recommend.

Interestingly, they all originate in Eastern cultures, where the experiences of physical fitness, mental harmony and spiritual identity are integrated to a far greater extent than in Western culture. In this culture, there is a schism between anything physical, mental or spiritual. Western body training is almost exclusively performance, task or work-oriented, creating bodies which are either "sports-car" bodies (good for a relatively few years' high performance) or over-muscled, tense, and over-worked. Most bodies are burdened and exhibit a lack of inner happiness or security. Our bodies reflect the values of our society and the pressures that are put upon us.

In Eastern cultures, the goals of tradition-honored physical training is

different. The integration and harmonization of the whole person is the goal and the process is respected as well as the result. Balanced energy, harmony with the laws of nature, serenity of mind and wholeness of being are its goals.

In Madison there are excellent teachers of Tai Chi Ch'uan, Aikido and yoga. The goals of these methods are far-reaching and the movements are completely in concert with the rolfed body. Other western methods that provide relaxation and fluidity are Feldenkrais, Trager and Aston, to name a few. Call me if you would like more information on where to study.

In the area of more common exercise activities, I would recommend low-impact aerobics, swimming, golf, walking, bowling, tennis, X-C skiing or any sport that gives you pleasure and eases the tensions of the day. Do whatever you do with the pleasure of movement. Let go of "striving," "trying hard" or any sense of self-sacrifice.

David Laden

Bibliography

Resources of related interest to the articles in this issue:

Ida Rolf Talks, Ida Rolf, Rosemary Feitis

Rolfing, The Integration of Human Structures, Ida Rolf

Body and Mature Behavior, Moshe Feldenkrais

Awareness through Movement, Moshe Feldenkrais

A Zen Approach to Body Therapy, William S. Leigh

Body Mind, Ken Dychtwald

Bioenergetics, Alexander Lowen

Character Analysis, Wilhelm Reich

The Anatomy of Change, Richard Heckler

Stretching, Bob Anderson

Light on Yoga, B.K.S. Iyengar

Spirit of Aikido, Morihei Ueshiba

Mentastics, Milton Trager

Surviving Exercise, Judy Alter

Tai Chi Ch'uan, Tem Horvitz

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actually showing us the measurement of its imbalance. For these bodies, exercise is detrimental—except as it offers a very temporary increase in oxygenation. The first need of these bodies is balance, their backs made sturdy, their knees made straight, their shoulders competent. Then, they can and will profit immeasurably by exercise. But when that happens the movement incident to their daily living will give them more effective exercise, than the daily dozen which earlier they had laboriously plodded through in their dutiful effort to “keep fit”.

Free Lecture on Rolfing

I will be presenting a free lecture and slide presentation at Mimosa Bookstore, 310 N. Henry Street, at 7 p.m. on Monday, October 17.

Bring or send a friend.

This is the perfect opportunity for people to find out more about Rolfing.

Future Issues

- Scientific research
- A physical therapist talks about Rolfing and back pain
- What is advanced Rolfing?
- Keeping the benefits of Rolfing
- Rolfing and vital energy
- and more