

## **Philosophy, Science and Practice of Maxalding 1 - Maxalding Physical Principles**

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### **Abstract**

In these series of articles I'll try to describe clearly the physical and psychological principles of Maxalding. This training system without apparatus is mainly based in the performance of Muscle Control (MC) exercises. The name *Maxalding* comes from the names of its founders, Maxick and Monte Saldo. It is one of the oldest training systems (established 1909) and one of the most successful ones. In the following sections I'm going to study the principal control techniques, types of muscle controls, times, series, progression, application to real exercises, comparison with other training systems, its effectiveness and its overall effects over health. Finally I'll dedicate a special section to the development of extreme concentration and relaxation techniques by means of Muscle Control.

## Philosophy, Science and Practice of Maxalding 1 - Maxalding Physical Principles

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### 1. What is Maxalding?

The word *Maxalding* is formed from the names of Maxick (Max Sick) and Monte Saldo (A. M. Woollaston), two of the best body-builders, gymnasts and teachers of Physical Culture of all times. This training system was developed around 1910 and lived a long life as a personalized postal course until 1980. Such a successful life for a training system which never had a lot of modern publicity media, is the most solid proof of its efficacy. It is estimated that thousands of satisfied pupils have been trained with Maxalding.

The core of the Maxalding system are not mechanical movements, but Muscle Control (MC). Many of the Maxalding exercises were revolutionary in their time and they are unsurpassed even nowadays . Some controls cause as many admiration today as when they were published for the first time.

MC teaches you to voluntarily isolate, contract and relax your muscles in a progressive way without the need of mechanical actions over the desired muscle groups. In order to achieve this, the student must learn some basic skeletal positions that make easier the feeling of each isolated muscle.

The principal goal of Maxalding is the overall control of the body and the mind

(knowing the logical limitations of the human being). The control that the will performs over the muscles produces a feedback process over the mind, reinforcing it as much as the muscles. By these means the concentration and will power increase.

Maxalding can be used alone or as a complementary training system. Besides this, Maxalding implies an art and a lifestyle in itself. Although the basic controls are few, the huge richness of the human body makes the mastery of MC practically limitless. The spiritual benefits of Maxalding are very important too and can be compared favourably with other training philosophies like Yoga or Tai-Chi. But Maxalding is not a mystical approach to Physical Culture, it is an art and a science in which the student devotes to the study of *the language of the muscles*. The scientific basis of Maxalding is solid and well founded.

There is practically no limit to the practice of MC, because it implies the internal organs as much as the external muscles. In advanced stages of Maxalding you would be able to regulate your digestive system, your breathing rate and your heartbeats by means of extreme relaxation techniques.

Although Maxalding does not require large amounts of energy, it is not an easy system. The student must have personal determination, a lot of patience and will power. But Maxalding is a very progressive program and can be learned by everyone. Maxalding is a personalized system that focuses on health over all. The benefits are countless and everlasting.

## 2. Physical principles of Maxalding

Maxalding is based mainly in two physical principles:

### 1. Conservation of energy. 2.

#### Distribution of energy.

Maxick explains his point of view about the energy conservation in the body in the following terms:

*[...] I discovered that by using the Will to control the muscles, not only did I gain development and strength, but that I was storing energy. By giving nothing out, I was slowly conserving energy,[...] so the more energy conserved, the more strength is proportionately attained, and with interest, because it reacts upon itself.*

*[...] The reasons for storing energy are manifold, but indicate first and foremost, the possibility of future action. Energy would be quite unnecessary were it not for the idea of action and its subsequent use.*

(HOW TO BECOME A GREAT ATHLETE, Maxick, 1911.)

This principle is explained further, in a more physiological basis, in other Maxalding writings.

*[...] It is necessary to say that any exercises performed, or any exertion made with a view to increasing the Physical Power, must not be carried far enough to induce excessive fatigue. This fact has been apparently overlooked by most teachers, whose summary advice is "to work until the muscles are incapable of doing anything further for the time being", or words to that effect. They also give to their unfortunate pupils to understand that, "the more work done, the more benefit gained", etc, regardless of the physical strength, will and capabilities of the individual.*

*We aim, first and foremost, at the improvement of Circulation, it being through that channel alone that every function of the body can gain vigour, and acquire increased activity and endurance.*

*This is not attained by several hundreds of movements gone through daily with dumbbells or some apparatus, nor by the tremendous output of energy which this involves. The energy must be retained and added to, and this is the end which we have in view in our System, as a whole of our teaching consists in the conservation of energy, by economizing the output; and, furthermore, in showing how to direct the energy to the best advantage.*

(HEALTH, STRENGTH AND WILL POWER, Maxick and Saldo.)

*And it occurred to me that it is not work, but nourishment, which makes muscles strong.*

(MUSCLE CONTROL, Maxick, 1911.)

This point of view has been proven by more recent investigations. For example, Olympic weightlifters train with very few repetitions in order to adapt the neural system, without fatigue, to maximum loads.

The biophysical explanation of this fact is surely very complex and not well understood yet, but basically consists in the ability of the muscles for increasing and storing elastic potential energy. The muscle fibers acts like flexible springs and MC increases the amount of tension that the muscle is capable of. The fibers adapt to this new situation and reacts upon the neurological system in a feedback process which produces larger outputs of neural energy to the muscles. The final result of MC is a more contractile capability of the fibers and a stronger neural signal to them.

This key idea is clearly developed in the following works.

*To understand my meaning it is necessary to consider the senseless waste of energy which occurs when any big muscular effort is made by an individual who knows not how to relax those muscles which he is not requiring at the moment.*

*A muscle that has been brought into prominence and condition by means of Muscle Control is full of energy and resistance, ready to work, and well fortified; whereas the muscle that has been tired by heavy work is usually lacking in resistance, and jaded.*

(GREAT STRENGTH BY MUSCLE CONTROL, Maxick)

In the Maxalding brochures we can read this.

*Such a method of exercise (Maxalding) builds up tissue, revitalizes the whole body and creates reserve energy; the abstract commodity which establishes endurance and resistance to disease.*

*This is the reverse of the old fashioned method which often defeated their objects by exhausting the user. Staleness and boredom invariably follow mechanical and repetition work. The endless repetitions and the counting prevent intelligent concentration, and monotony is the deadly enemy of all living creatures.*

One of the Maxalding claims is the possibility of building healthy muscular tissue without the need of large damage and reconstruction of muscle fibers, a very different approach than the pursued one by the nowadays bodybuilding methods. The muscular growth processes are not well understood yet, but it is evident that a method which does not implies such muscle breakdowns would consume less energy. We shall detail this point in following sections. As Court Saldo said

*Maxalding's aim in every case is to work for complete functional efficiency, because a sufficiency of natural exercise will them stimulate muscle growth. Strenuous*

*muscular work does not build muscle. If it did, the hardest workers, particularly those who start in childhood, would be the biggest and strongest people. But the reverse is actually the case, because strenuous training and hard labour actually break down the muscular tissue.*

*We know that there are the rare cases of men who are able to train strenuously and show good physical development. But such persons are possessed of extraordinary powers of recuperation and they would get better results from more scientific methods of training. Some men are vitally strong enough to withstand several years of hard wear and tear on the organs, and it is these rare cases that are held up by advocates of strenuous training as proof of the efficacy of such training. However, few people have the time or inclination for such unnatural methods, and it has been proven that by reasonable methods everyone is able to gain and **maintain** their full potentialities in health, strength and muscular development. I use the word **maintain** because only when a natural method is used can the training be continued throughout life. With Maxalding a correct amount of exercise can always be taken, because the power employed is controlled by the strength and vitality of the performer. Thus as the strength and vitality increase, the effort correspondingly increases without any additional increase in the number of repetitions required. And conversely, as age advances, the effort correspondingly decreases, enabling the exercises to be continued and functional efficiency retained into old age.*

In Monte Saldo's NATURE'S WAY TO HEALTH we can read this.

*The principles of energy-conservation and muscle-control apply here [heavy muscular development], the former to allow cell tissue to renew speedily and the latter to enable exercise to be carried out with the least possible tissue consumption or breakdown.*

*Additionally a specially muscle-building diet should be adopted, and plenty of sleep taken. Regular hours for exercise, meals and sleep will also act favourably in building muscular tissue of a quality that will bestow great strength.*

And in HOW TO EXCEL AT GAMES AND ATHLETICS.

*All expenditure of energy creates tissue consumption and eventual fatigue. But if no energy were expended, movement would cease and physical decay set in. Therefore, conservation of energy must not be confused with inertia or sloth [...] in the actual building, as in the actual practice of the sport, tissue consumption and fatigue alternate with tissue building and the storing up of energy. [...] The performer, however, need not be sacrificed to the stupidity of the trainer and should not continue training after signals of real fatigue or distress have set in.*

The principles of Energy Conservation and Distribution are the key to improve endurance without increasing the number of repetitions in the Maxalding system. Personally I have found this theory correct. One of the most remarkable effects of MC is the increasing of muscular and cardio endurance in a short time of training. In the same brochure we can read an explanation to this fact.

*Endurance is controlled by the power of any individual to **Conserve and Distribute Energy**. An individual who conserves the energies wisely during training, and distributes them wisely during effort or contest will be able to last longer on any particular occasion, and also remain fit for a greater number of years, than another individual lacking this ability, but equal in other respects. To reach a superlative degree of endurance, a knowledge of energy-conservation, and energy-distribution is absolutely essential. A mastery of muscle-control enables antagonistic muscles to become or remain relaxed, while contraction of necessary muscles is taking place.*

This fact can be proved by the great matches disputed by Maxick, in which there were a lot of maximal effort lifts. Such continuous lifting is exhausting and can only be performed by people with an exceptional endurance. Tromp van Diggelen was witness of some of these amazing endurance feats.

*Max has often run down a long flight of stairs holding me aloft with one hand.*

*For instance, when Sick was with me in Johannesburg we were one day having photos taken to be used in the advertisements of a famous brewery [...] we were fooling about in the photographer's studio when during the morning's work Max sided-pressed me (185 pounds) above his head supporting me (on my back) on his open palm, no less than 16 times; in his left hand he held a glass of beer filled to the brim with his arm stretched at right angles to his body and he did not spill a drop!*

*Here is just another "stunt" that even Saxon would have found hard," I used to lie with my back on Max's open palm and he would tell me to close my eyes and it is honestly true that he would then press me up so slowly that I would not know I was at arm's length until he told me to open my eyes."*

*Max Sick once won the lightweight, middleweight and heavyweight class in the Tyrol Championships in one day; an exhibition not only of strength but of unbelievable endurance.*

(A SUPERMAN - MAXICK! Tromp van Diggelen)

Maxalding pursues a perfect health, it is much more than a simple training system. Maxalding produces the direct exercise of vital organs, which is very much related with energy conservation of the body.

*Energy conservation becomes automatic in Maxalding, for the organs are being exercised while the great muscles of the body are at rest, or only slightly used. This is*

*the direct reverse of the old-fashioned methods which often exhausted the muscles in an attempt to exercise the organs. The organs which have to feed the muscles; instead of benefiting, frequently became injured in an attempt to cope with the demands upon them. Another vicious circle, defeating its original object! Another amazing fallacy is that exercising the muscles until they ache, will increase their power. The truth is that the organs should be exercised so that they will energize and nourish the muscles and prevent them from becoming too easily fatigued.*

(NATURE'S WAY TO HEALTH, Monte Saldo)

This goal is summarized in the introduction to Monte Saldo's MAXALDING.

*Exercise must be directly applied to the parts of the body that require it, and such exercise should be of a nature that will correctly adjust anatomically, and stimulates the functions without defeating the object by exhausting the user.*

One of the most frequent questions about Maxalding is the duration of the exercises, number of repetitions and sets and periods of training. All these questions are asked from a logical point of view by means of the energy-conservation principle.

*What form does the exercising take?*

*It is a combination of all the natural movements that the healthy human body is capable of performing, so analyzed as to prevent unnecessary repetition of movement. In organized sequence, every muscle or muscle group is contracted, relaxed, stretched and controlled. The important exercises aim -...at the attainment of a purely correct position, the eventual mastery of which enables the performer to retain that perfection of pose and position with one repetition or performance every twenty-four hours.*

*To explain briefly, the muscle or muscle group has been fully contracted, relaxed, stretched and controlled, and the position held long enough to ensure perfect blood irrigation and consequent nourishment, but without any appreciable output of energy.*

*[...] a method based upon such sane and scientific principles must produce quicker and better results than the common method based of frequent repetition of mechanical exercise which always fatigues the muscle, breaks down tissue, depletes the energies, toughens the muscles - causing muscle binding - and often strains or overworks the heart.*

*Energy and Vitality are conserved to such an extent that the overplus not required is immediately shown in the development of healthy, pure muscular tissue.*

*This conservation of energy also very speedily creates an exceptional condition of will-power, resistance to cold catching and fatigue. One does not find oneself used up after the ten to fourteen minutes of Maxalding, but extraordinarily refreshed and buoyant.*

This paragraph contains the answer to the "key question" of MC, what should the optimum duration of contractions be? First of all, MC exercises involve a sequence of actions in this order:

- (1) Contraction.
- (2) Relaxation.
- (3) Stretching.
- (4) Control.

The performance of MC in this order is of greatest importance for an adequate muscular development. Although this point will be treated in much more detail in following articles, the complete control of a muscle implies these four steps.

- (1) Contraction of a muscle or muscle group in order to direct blood flow to it, this contraction must be held "several seconds" to assure a good effect
- (2) Relaxation of the other muscles during the contraction and subsequent relaxation of the desired muscles. This permits increase circulation into the exercised muscles. A very prolonged contraction generates so much pressure that it prevents correct blood flow.
- (3) Stretching of the contracted muscles. By means of stretching the blood flows all over the muscle, the fibers adapt to real movement and remain supple.
- (4) Control. The real control is achieved only when a muscle can be contracted and relaxed in both stretched and flexed positions. Finally these actions could be done without any mechanical action or assistance.

We can see how just how modern are these ideas. In fact, many of the most scientific training and therapeutic systems of today, like PNF stretching, share analogous concepts. In many respects, Maxalding can be considered a system much more advanced than PNF, because it permits the performance of exercises by the unassisted individual.

From the information extracted from the Maxalding book and courses, we can calculate a very approximate time for each contraction. Each session is composed from a number of exercises that vary but is about ten in most cases. We can deduce from this that each exercise takes about one minute. But, does this imply that we must sustain the contractions for a such large period? I think not. Such unnatural practice is the basis of "isotension", a degeneration of the original Maxalding system.

In the Maxalding courses the recommended number of repetitions is about 6. Considering that the time of each contraction is similar, we can conclude that the real duration of the contractions is approximately 10

secs.

The abdominal exercises, for example, must be held no more than 5 seconds.

The three first phases are clear, but what is the exact meaning of *control*? This is a very difficult question and the answer is not unique. We can consider three basic types of MC:

- Static Muscle Control (SMC).
- Ballistic Muscle Control (BMC).
- Dynamic Muscle Control (DMC).

Depending on your goals you can concentrate more in one type or another.

SMC is the most basic of the three. It consists in the ability to contract and relax isolated muscle groups in almost every position. In this case, the *control phase* would conclude with another contraction of about 10 secs. in the stretched position (a very difficult task if you try it, indeed). This control must be always practiced, because it is the basis of the other two and permits a very good strengthening exercise in itself.

BMC consists in the quick performance (about 1-2 seconds) of successive and alternating contractions and relaxations of the same isolated muscle. This MC method is called *quick reflex* in the original Maxalding writings. It is recommended for developing high speed and power. BCM is more difficult than the first, because during an explosive contraction, the surrounding muscles tend to be contracted too. This explosive controls are very important, because they teach you how to relax unnecessary muscles during quick and demanding exercises for preserving energy. The mind-muscle link reinforces by means of BMC adapting to the ability of generating extremely powerful contractions in critical situations. BMC can be also the basis of very effective passive defensive techniques against no shooting attacks.

DMC is the application of MC to real

movements. If you can move a group of muscles in an isolated manner, relaxing the others along the overall range of the articulation, you have DMC.

All the three types of MC are necessary and they must be mastered in order to be a perfect Maxaldist. But, the original courses do not develop the potentialities of BMC, and they center in the performance of controlled bodyweight leverage exercises. The structure of the courses can be summarized in this form.

- (1) Performance of preliminary mechanical exercises in order to feel the contraction of isolated muscle groups. These exercises can be of dynamic and postural nature.
- (2) Increasing of isolated contraction by means of will concentration. This implies a progressive elimination of mechanical exercises which could interfere with the pure mind-muscle connection we want to achieve.
- (3) Progressive ability for relaxing statically and dynamically all muscle groups, including stretching positions.
- (4) Performance of real sports with controlled muscles. Maxalding uses non apparatus exercises, but it is also best applied to martial arts, gymnastics and weight lifting.

The Maxalding courses recommend only one set per exercise, but in the first courses the number of repetitions is not fixed. Monte Saldo justifies this saying

*Perform the exercises of this lesson ad lib. as far as repetitions is concerned.*

*I do not want you to have a fixed number of repetitions for each exercise for the following reason.*

*The amount of exercise that would seem but light work to you on one day, might the next leave you in a state of exhaustion and this*

*must never be allowed to happen.*

*So do just as much exercise as you feel you can conveniently manage at each particular bout, never forcing or straining the muscles, but just coaxing them into suppleness and control.*

*Perform each exercise slowly and carefully, as soon as you feel that the muscles you are employing have been thoroughly exercised, but not fatigued, completely relax them.*

*Aim always for perfection in the performing of each exercise, for correct performance is of greater importance than repetition.*

But many people are not satisfied with this explanation and are worried about the possibility of under-training or over-training. As a general rule, Court Saldo establishes the convenience of 6 repetitions with full concentration. In several exercises that imply the realization of movements with high concentration Monte Saldo advises that *the performance of 6 repetitions should be a maximum*. Personally I have found that 2-5 repetitions of DMC exercises is enough. If you perform the four phases of MC in order in one session and you train daily (a very much recommended Maxaldist practice for a healthy development), one of the best combinations is this.

- 1) Perform one repetition of a SMC exercise for one isolated muscle (maximum contraction, just before muscles begin to vibrate) of 5 complete breathings.
- 2) Relax the muscle during one or two complete breathings in its stretched position.
- 3) Repeat the same exercise.
- 4) Relax.
- 5) Perform the same sequence of SMC for the antagonistic muscle, this permits a full

stretching of the worked antagonistic muscle.

- 6) Move to the next muscle group in the same fashion.
- 7) Relax all muscles during 5 – 10 breathings.

This method should be applied without interruption to all important muscles of the body in a descending, from head to toes, fashion. This important theme will be analysed in depth in next articles.

The last phase of real MC (not just the performance of contractions) is the key to the other great principle, the **distribution of energy**. The method for contracting the muscles for a correct distribution of energy is very well explained by Monte Saldo in his book

HOW TO EXCEL AT GAMES AND ATHELETICS.

*To train any muscle with the object of gaining perfect tone, take it from the position in which it can remain completely relaxed and soft to a position that allows fullest contraction and bulking. Hold it in this position and gradually increase the contraction until it has been brought to its hardest condition and fully suffused with blood. Then return it to its position of relaxation. If blood suffusion has been thorough, the temperature of the muscle will increase and the tissues will have been nourished without any notable breaking down, as would be the case if mechanical repetition exercise were employed. This is the true way to build tissue, as the breaking down is so slight and the nourishment so easily provided. The contraction should not be held long; and light self-massage of the muscle can follow. The contraction should be repeated until it is felt that the muscle has been thoroughly exercised but not actually fatigued.*

But, MC **does not reduce** to this sort of contraction. This is only one preliminary form of SMC, called *peak contraction*. The misuse of this technique was the cause of the

misunderstandings and critiques from several strongmen of the past to MC, like Alan Calvert, who was sceptic about the possibility of true development by means of MC.

Some people experience dizziness a few hours after trying to do MC. The cause is a bad distribution of energy over the muscles and the saturation of the nervous system due to strain. Successful MC has two different and equally important aspects.

- (1) The effective isolation of muscles.
- (2) The "fine tune" of the muscle tension.

Unfortunately, the control of the tension has been ignored and poorly understood. The control of the isolated muscle tension is the very key of MC and a cornerstone of the whole Maxalding system. We can read continuously this advice in the Maxalding works, *don't force your muscles, coax them*. But, what is exactly the meaning of these words?

**Do not allow your muscles vibrate!** Muscle vibration is the worst enemy of MC, believe me. Almost every Maxalding student makes this mistake at the beginning of his or her learning (yes, Maxalding is an ideal training method for women, too). This bad practice wastes a lot of precious energy and it is very dangerous. Sometimes it is more difficult to learn to control your internal tension than the actual isolation of a muscle. How can we know that we are performing correctly a control?

Adopt the position for mastering an isolation. Increase your tension slowly, when you feel that your muscles are hard, but not rigid (just the step below vibration), sustain the tension about 5 breathings, no more no less. Do not eliminate the tension too suddenly, take about 1 slow breathing to do it. Another good clue to know if your tension is correct is to feel that you can move the controlled muscle in spite of the tension. If you cannot move a contracted muscle, you have

not mastered MC. Remember always this very important point: muscle-vibration is the opposite to muscle-control.

Maxick is very clear in this respect, the principal aim of MC is its application to health and the performance of real feats of strength. MC alone represents only one term of the global equation, related to energy conservation. But for a perfect body you must also practice the second term, involved with the energy distribution. A body replete with energy is useless, if you do not know how to employ this energy in a real situation.

*I do not, and never have, claimed that by muscle-control alone, unaided by mechanical exercises, each muscle may be brought to its highest state of development: but I do claim that mechanical exercise, either with or without apparatus, will never produce the limit of strength and development of which the individual is capable unless combined with muscle-control.*

(MUSCLE CONTROL, Maxick)

Besides, Maxick explains in his book how to control each muscle in all its positions. And he recommends several exercises for the same parts in order to achieve this goal. Monte Saldo shares this point of view and shows us it in more detail.

*Muscle toning by resistance [...] compels the muscles to work in groups and is, consequently, more destructive to tissue than the method of isolating muscles by contraction. Resistance however, becomes necessary to establish muscular coordination. Resistance can be provided in a number of ways. The weight of the body supplies resistance to the legs in the deep knee bend or the weight of the legs supplies resistance to the abdominal muscles in the usual supine leg-raising movements. There is also the more definite method of using the two arms in resistance to one another, or the neck against the arms and so on. When resistance exercises are used for developmental purposes, even fewer repetitions should be used than in the case of*

*voluntary contractions. Exceptional toning by resistance might be provided by the lifting of heavy weights. Thus, a man who has gained a good physique by natural methods and strengthened his internal organs against risk of strain, might find it necessary to occasionally lift heavy weights to maintain the muscle tone necessary for his best lifts to be accomplished. In so doing he would, of course, reduce his speed for lighter efforts, but the example is given to indicate my meaning of muscle-toning in its broadest sense.*

(HOW TO EXCEL AT GAMES AND ATHLETICS,  
Monte Saldo)

This is a very important paragraph in the Maxalding literature, because it centers the discussion about MC. Is MC able to proportionate great strength and development? Yes, but in a non specific and abstract form, not immediately suitable for real feats of strength. If you want to train for attaining some specific goal, you must sporadically adapt your controlled muscles to the desired task. For example, if you want to perform a perfect one armed one legged push up, you must acquire the sense of equilibrium necessary to balance the body. MC can give you enough strength and control for success, but it cannot develop the feeling and gravitational balance of this concrete exercise. In spite of this, it is true that a master in MC will need only very few repetitions to successfully perform this feat of strength, because the only thing here is to adapt the muscles for working adequately in groups. This is that we want to mean by "distribution of energy". Note the mention to the convenience of training with slow movements and lighter weights for maximal strength. I will return to the controversy about the use of weights in Maxalding in the next paragraphs.

The periodization of training is another interesting question. Many of the training methods of today recommend to work

the most important muscles only three times a week. However, the Maxalding practice is daily because the exercises are performed with very few repetitions. Modern research sustains this theory. Athletes whose main aim is the development of a large strength to bodyweight ratio, as Olympic weightlifters, powerlifters and gymnasts, train several times a day with very few repetitions (2-3) in order to avoid fatigue and to adapt the neural system to high loads.

Following the suggestions of Maxick and Monte Saldo, we can design different exercise strategies. A very complete and productive training schedule is this.

(1) *Day 1.* One session of SMC in the manner described before, followed by self resistance exercises (1 set, 2-5 repetitions).

(2) *Day 2.* One session of 5 BMC of one breathing each over the same isolated muscle for all important muscles in the body in descending order. You must relax the muscle during inhalation and contract it powerfully during exhalation. Do not force exhalation, if you cannot regulate your exhalation you are forcing the muscles too much. After this perform a series of virtual lifting movements (DMC) over full range of motion of muscles (2-5 repetitions). Although the use of weights is not necessary at all, some people can find very useful to do the exercises with light dumbbells (2-5kg each) for feeling some resistance over the correct muscles. Actually, it is very difficult to learn to relax the antagonistic muscles without any feeling of real resistance. This was a very frequent practice among old strongmen, including Maxick.

(3) *Day 3.* One session of muscle controlled bodyweight leverage exercises (2-5 repetitions per exercise).

These routines will be developed fully in the corresponding articles in order to take in count the necessary progression and individu-

alization of the exercises. Maxalding must be fitted to the necessities and abilities of each individual.

We can define the energy distribution of Maxalding as the ability to use optimally the energy generated by means of MC.

*Suppose you were to take a fairly heavy weight, one heavy enough at any rate to necessitate the calling into work the greater energies of the body. Well, there are several sets of muscles as they are required for use, and thus send the essential amount of energy into each, just at the important moment. It means, moreover, that you are using the will-power and strengthening thereby the source of all power and energy.*

(HOW TO BECOME A GREAT ATHLETE, Maxick)

When Maxalding is applied to the performance of a particular sport (for example, martial arts, gymnastics, weight-lifting, body-building, ...), we can distinguish five definite phases for a successful training

(HOW TO EXCEL AT GAMES AND SPORTS, Monte Saldo).

1. The perfect development and conditioning of the physique for a particular sport.
2. A practical knowledge of muscle-control to ensure the full assistance of all essential muscles, and the complete relaxation of all muscles that are antagonistic to the desired movement.
3. A thorough and mechanical mastery of all points of technique of the particular sport.
4. The correct period of rest before contest, to suit the sport and the idiosyncrasies of the performer.
5. Intelligent handling of the contestant on

the day of the contest.

Particular applications of the principle of energy distribution are given by Monte Saldo.

*Correct distribution of energy in any particular sport must be controlled by the special requirements of the sport. Thus in the performance of feats of strength, when the lifting of the heaviest possible weight is the object, as few lifts as possible should be used, with the greatest amount of energy put into a single effort. Conversely, the long-distance runner would spread his supply of energy over the whole distance, for an unwise distribution of energy would spoil his time, as he would use too much energy at certain periods of the race to an extent that would prevent him retaining sufficient energy to complete the race in good time [...].*

In the next article we will study the very important Psychological Principles of Maxalding.