

CHAPTER VI

Warm Up and Conditioning

A brief explanation of warm up and conditioning will be presented in an advisory manner rather than in a detailed capacity in the following chapter.

One factor that cannot be stressed too emphatically is the *need for a warm up previous to participation in any activity*. A warm up for vigorous exercise is needed to prepare the muscles, the joints and the entire organism for strenuous activity. It is body preparation for immediate activity.

Conditioning

Conditioning is a state of body tonus. It is a prerequisite to the desired end of optimum efficiency in the execution of any activity that demands the effective physical and mental fitness of each participant.

Once the cadet has conditioned himself to the sport in which he expects to participate, a thorough, progressive warm up assures responsive qualities of pliancy, flexibility, suppleness, limberness of muscles and general adaptability of the organism. An effective warm up invigorates, stimulates and prepares a person for further more vigorous activity. It insures him against pulled muscles, and muscular strains.

If an individual ceases active participation during competition and has to await his turn between events, he should maintain the body warmth that he had acquired by putting on a sweatsuit or by wrapping himself in a blanket. This precautionary procedure maintains the body heat established by the warm up. The muscles may then go into immediate action when the time comes to continue the activity or the event.

Following strenuous activity, the judicious performer manifests as much care in the tapering off process as he did in the warm up. When he is ready for the showers, he proceeds to them immediately and does not loiter, or subject himself to draughts or a sudden drop in body temperature. The cadet who uses both the warm up and tapering off procedures is likely to be the one who will require fewer visits to the training room or to the infirmary.

WARM UP PROCEDURES

Free Exercises

Free exercises or calisthenics as a means of limbering up are indispensable as a warm up procedure. The type used will depend on the background of the instructor and may be allied to any particular sport or activity.

A combination of Danish and German free extension exercises is recommended. These total body movements executed rhythmically are conducive to stretching the large muscle groups as well as the smaller fundamental muscle groups so necessary in the execution of gymnastic stunts.

A lesson plan for conditioning exercises is as follows:

1. *Arms* (extension of arms and shoulders).
2. *Trunk Turning* (for waist).
3. *Leg Raising* (for pelvic region) or *Balance*.
4. *Trunk Sideward Bending* (for extension of side of trunk).
5. *Neck and Chest* (for loosening neck and chest).
6. *Trunk Forward Bending* (for extension of lower back and thighs).
7. *Heavy Leg* (for legs).
8. *Trunk Lowering*.—Trunk straight from head to hips (for postural effects).
9. *Abdominal* (for abdominal muscles).
10. *Correctional*.—Include work where there is noted deficiency in strength (usually support work or abdominals).
11. *Stepping* (for legs, rhythm, balance, and agility).
12. *Breathing* (for tapering off in effort and relaxation).

The following body positions should be used in all warm up actions:

Standing.

Kneeling.

Sitting.

Lying.—Prone and Supine.

The conditioning routine should be given a name such as "Gopher Conditioner"; "Illini Eleven" or "Navy Needfuls." The exercises, too, should be given names to save time for actual exercising instead of wasting time giving a lot of commands.

Coordination and Agility Drills

The instructor gives brisk commands demanding quick reaction and response of group. The class assumes these designated positions and accomplishes the movements as fast as possible for alert execution.

Executory commands may be used as follows:

1. *Run!* (Running in place lifting knees high.)
2. *Squat!*
3. *Belly to Deck!*
4. *Back to Deck!*
5. *Stand!*
6. *Head to Deck!*
7. *Forward Roll!*
8. *Backward Roll!*
9. *Fall Forward—Sit Through!*
10. Instructor adds others as he considers advisable.

Limbering Exercises

Body stretching, twisting, bending, knee bending and running in place are activities that may be employed. These exercises may be executed in a limited area and at will.

PRINCIPLES INVOLVED IN LESSON PLANNING

Selection of Appropriate Exercises

The development of the big muscle groups, namely trunk, chest, abdominals,

arms and back, should be emphasized. For the legs, additional running in place or squat jumps should be prescribed.

Totality of Musculature Included in Lesson

The entire musculature should be included. No one part should be exercised to the neglect of another.

Unity of Lesson

The lesson plan should proceed with logical continuity with the energy curve in mind.

Progression or Change in Lesson

The introduction of new exercises maintains interest and individual desire to produce better results. Obvious weaknesses and deficiencies for gymnastics, for example, the abdominals and the triceps, should be remedied by means of special work.

The Principle of the Energy Curve

The exercises should proceed from the relatively easy to the strenuous and complex and upon reaching the peak of the energy curve, tapering off in effort should follow.

ELEMENTARY TRAINING OR CONDITIONING

The beginner must learn that the specifics for gymnastic success are:

1. *Upper Body Strength, Power, Flexibility, Balance and Agility.*
2. *Strength.*—Strength may be developed by: Push Ups, Chins, Dips and the like.
3. *Grasps.*—Grasps must be strengthened: A tight grip should be stressed at first. The beginner should strengthen progressively the ordinary, the reverse, and combined grasps.
4. *Body Positions Should Be Mastered.*—Stand—Hang (Ordinary)—Hang (Inverted) on the hands—On the head—Hanging from knees with head down.
5. *Stunts as a Warm Up.*—Stunts may be used as a warm up as preparation for performance on apparatus. Such a procedure may be accomplished best by using simple fundamental stunts. Instructional material from the lesson of the previous day may be used effectively for the warm up.
6. *Progression in Gymnastic Skill.*—All-round physical development should be encouraged: The cadet should be trained adequately both in the hang and in the support position.

Thorough knowledge of elementary stunts: Effective advancement from the simple to the complex should be obtained by means of proper mastery of elementary stunts.

Building of gymnastic routines: Routines should be built from separate stunts as they are mastered.

7. *An Awareness of Safety Measures.**

* See Chapter V.

ADVANCED TRAINING OR CONDITIONING

The individual gymnast usually develops a conditioning schedule of his own under competent supervision.

During the first month, practice sessions should be of short duration and should include calisthenics and light workouts on the apparatus. Flexibility, organic power, agility and endurance must be built up; the hands must be toughened gradually.

Each team member should be required to practice on each piece of apparatus, regardless of individual preferences.

Individual competition leads to winning. Winning is important but the prime purpose of any physical activity is to fully promote general all-round development. Specialization on a particular piece of apparatus to the exclusion of others hinders such a purpose of all-round achievement.

After each team member has advanced in all-round ability and skill, time can be devoted to specialization. However, it is a sound policy to encourage gymnasts to work on at least three pieces of apparatus in a meet.

After the first month of practice, each member should make up a tentative optional routine of stunts on at least three pieces of apparatus. No matter how simple these activities are they should be practiced every day. The first part of each practice should be spent on the optional figures, which will be composed of stunts already mastered. Constant repetition of the figures will build endurance and improve form.

The second part of apparatus practice should be devoted to the learning of new stunts. When mastered, they can be included in the optional routine that has been tentatively planned by the performer. Thus a gymnast is never at a loss as to what he will do in a meet.

Practice sessions should be held every day, but different apparatus should be used on alternate days. Thus, interest is maintained and sore hands and staleness are prevented.

If a required combination is to be part of a competition, it should be practiced every day together with the tentative optional routine.

One month before the first meet, a weekly practice meet should be held in order to brush up on the finer points of competition.

The conditioning of the hands is of utmost importance. Regular workouts with progressively longer practice periods should condition the hands adequately. Whenever the hands feel tender and sore, practice should be stopped. The bar should be kept clean at all times. (See Illustration No. 37)

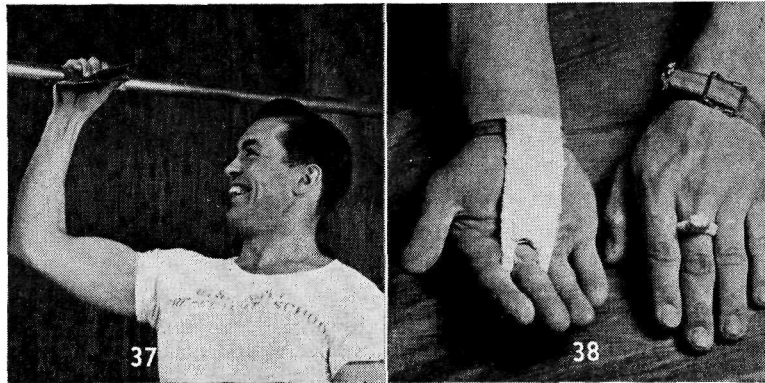
Avoid ripping the hands. Calluses should be pared periodically by the trainer with a razor blade. They may then be smoothed off with emery cloth or sandpaper.

The hands should be washed thoroughly after practice and all magnesium carbonate and resin should be removed.

The hands toughen more quickly and effectively by working on various pieces of apparatus. Soreness caused by working on the high bar may be relieved by practice on the horse or the parallel bars. A specialist is forced to discontinue practice should his hands bother him. The hands may be toughened gradually by spacing practice sessions on alternate days on the same apparatus. Application of tincture of benzoine to the palms after practice should help toughen the hands.

A protecting hand guard may be worn. (See Illustration No. 38) Make it out of lamp wick $1\frac{3}{4}$ " x 6", one end of which is slit, through which the middle finger is

slipped, while the other end is attached to the wrist and held secure by means of a strap. Also from the standpoint of protection, rings should never be worn in practice.



37—Cleaning the bar.

38—Protecting hand guard.

After the competitive season is under way, efforts should be directed toward perfecting routines rather than learning new tricks.

Hints to the Competitor Concerning Continuity of a Routine

1. Use only those stunts which have been mastered completely.
2. Avoid intermediate or extra swings.
3. Keep routine reasonably short.
4. Relax in all negative movements; but maintain good form even though certain muscles are relaxed.
5. Grace of movement rather than strength should be emphasized. Rhythmical and swinging tricks are much more difficult and rate a higher score.
6. A good start and finish to a routine makes a very favorable impression on judges. Plan a smooth and spectacular mount and dismount.
7. Let proper approach to the apparatus and retreat become habitual.