AN ANALYTICAL STUDY OF THE TRAINING AND CONDITIONING
PROGRAMS FOR FOOTBALL IN SELECTED COLLEGES
AND UNIVERSITIES OF TEXAS

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AN ANALYTICAL STUDY OF THE TRAINING AND CONDITIONING PROGRAMS FOR FOOTBALL IN SELECTED COLLEGES AND UNIVERSITIES OF TEXAS

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CHAPTER I

INTRODUCTION

Selection of the Problem

Source. -- This particular problem was chosen because of a personal interest in the training and conditioning of athletes for football. In addition to this personal interest, the writer hopes to gain information that will help in the development of plans for a desirable training and conditioning program for use in college football.

Justification. -- Training and conditioning for football are undertaken universally in America at the beginning of each football season; and this program involves many people, both participants and spectators. The participants are composed mostly of athletes, coaches, and trainers. These individuals are the ones who diligently prepare themselves during the weeks of the football season in order to be able to amuse and thrill throngs of spectators each week-end. In preparation for the game, athletes, coaches, and trainers have need for a definite training and conditioning program. This training and conditioning program assists coaches and trainers to condition each athlete physically and mentally for his duty.
Training and conditioning should be a systematic preparation or attempt to place all members of a team in the field on all occasions in such physical condition and fitness that they may extend themselves to the limit without fear of physical injury or overexertion. The proper training and conditioning of the team should be considered the most important factors incident to a successful season.¹

The two main purposes which activate all who are interested in the promotion of athletics are, first, to establish procedures which will enable the participant to enjoy the activity to the fullest degree but not incur unnecessary injuries; secondly, to establish procedures which will give to the injured adequate care and treatment should an injury occur.²

Although training and conditioning programs are used by many schools to prepare athletes to play football, differences are found in the practices carried on in each program.

Limitations and Scope of the Study

Nature of the problem. -- The problem of this study is realistic and practical in nature. The training and conditioning program for athletes is composed of important information and procedures for the preparation and care of the athletes as participants in football. An examination of printed literature in the field to determine the theories of accepted authorities revealed the role of training and conditioning programs for football.

¹ G. S. Lowman, Practical Football, p. 1.
² Frank S. Lloyd, George D. Deaver, and Floyd R. Eastwood, Safety in Athletics, p. 35.
**Purpose of the study.** -- The purpose of this study was to determine what practices and policies were being used in the training and conditioning programs for football, the similarities and differences of the training and conditioning programs for football, and to recommend a training and conditioning program for football in colleges based upon the present practices of colleges and universities of Texas. Through the study, college coaches, high school coaches, and students who are preparing to be coaches may obtain information concerning the present practices in the training and conditioning of college athletes for football.

**Related Studies**

Studies have been made on athletic injuries, and sections of various books have been set aside for training and conditioning programs. In addition, a study was made by Dr. G. W. Hartman of Pennsylvania State College in 1929 on "What Constitutes a Good Football Team?" Dr. Hartman, in his study, used questions relative to the study of training and conditioning athletes for football, with questions pertaining to the topics of a training table, coaching staff, and training procedures.

**Procurement of Data**

In the procurement of data for this study, a survey was made of books and periodicals written by authorities
in the field of the training and conditioning programs for football. Personal interviews were held with the coaches of North Texas State College, Southern Methodist University, and Denton High School, and an observation was made of the training and conditioning program of North Texas State College. Questionnaires were sent to the coaches of thirteen selected colleges and universities in Texas. The questionnaires contained questions regarding the training and conditioning program carried on by the selected schools. The selected colleges and universities are those members of the Southwest Conference which are located in Texas and all members of the Lone Star Conference. The schools selected were as follows:

Southwest Conference:

1. University of Texas.
2. Southern Methodist University.
3. Texas Christian University.
4. Baylor University.
5. Texas Agricultural and Mechanical College.
6. Rice Institute.

Lone Star Conference:

1. North Texas State College.
2. East Texas State Teachers College.
4. Sam Houston State Teachers College.
5. Southwest Texas State Teachers College.
6. Trinity University.
7. University of Houston.

Definition of Terms

For the purpose of clarification, certain terms used in this study are defined as follows:

Training is to put the body with extreme and exceptional care under the influence of all the agents which promote its health and strength, in order to enable it to meet extreme and exceptional demands upon it.\(^3\)

Conditioning is the...

... preparation of the aspiring youth for the intense muscular and neural exertions which are incidental to competitive athletics; development to the highest possible degree of strength, endurance, vitality, and resistance to injuries; and finally the progressive building-up of the heart, lungs, and the other vital organs to meet the strenuous demands upon them.\(^4\)

Organization and Presentation of the Study

This study is divided into four parts. Chapter I is the introductory chapter, giving the source and justification of the problem, the limitation and scope of the study, the data related to this study, the procurement of data, the definition of terms, and the organization and presentation of the study. Chapter II shows the development of the

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\(^4\) Ibid.
questionnaire and its distribution to the coaches of the thirteen colleges and universities which were selected for the study. Chapter III is an analysis of the practices and policies that were used in the training and conditioning programs for football. Chapter IV is a summary of the study, and a recommendation for a training and conditioning program for football in colleges based on the findings of the study.
CHAPTER II

THE FORMULATION OF THE QUESTIONNAIRE TO OBTAIN DATA
RELATIVE TO THE TRAINING AND CONDITIONING
PROGRAMS FOR FOOTBALL

The method decided upon for securing the information
for the training and conditioning programs for football was
the questionnaire, as this was the most logical means that
could be devised to obtain the necessary data.

Information used in making the preliminary question-
naire was gathered from human and documentary sources. The
human sources were coaches, physical education instructors,
and athletes who had played college football. These per-
sons were interviewed and given a list of questions con-
cerning the training and conditioning programs for football.
They were asked to make any additions to the list which they
thought would assist in gaining the information needed for
the study. Documentary sources were books and articles
written by authorities in the field, and these were used to
supplement the questions made by the persons interviewed.

In the construction of the questionnaire the following
criteria were arbitrarily selected and set up as a guide:

1. To make items as brief as possible.
2. To make statements readily comprehensible.
3. To give clear instructions for answering.

4. To leave space for additional questions.

5. To have logical sequence of questions.

6. To space questions carefully so there will be available room for answers.

7. To state items in such manner that they could be answered by "yes," "no," or by a number.

8. To formulate questions that have identical meaning to everyone.


10. To provide space for signature of respondent.

The necessary items decided upon were selected from the information taken from publications and from the persons interviewed.

The questions then were divided into the following topical units:

1. Coaching and training personnel. -- Questions on this topic consist of degrees held by trainers, experience of coaches and trainers, the number of coaches, managers, and assistants included on the staff, the scouting of opponents by the coaching staff, and the attendance of training clinics and coaching schools by the coaching and training staff.

2. Training field. -- Questions which were related to this topic were on the sod of the training field, the cere
and watering systems of the training field, the distance of the training field from the dressing rooms, and the dimensions and equipment used on the training field.

3. **Conditioning procedures.** -- Questions regarding this topic were on the amount and length of time devoted to calisthenics each week, health charts and examinations of each athlete, and the time used each week for scrimmage and for blocking drills.

4. **Training room.** -- Questions relating to this topic were concerned with the ventilation, cleanliness, and equipment of the training room, the training room as a separate unit, and the responsibilities of the one in charge of the training room.

5. **Dressing room.** -- These questions pertained to cleanliness of the dressing room, the system of handling playing equipment, the heating of the dressing room, the care of contagious diseases such as athlete's foot, the supply of hot water, the number of showers in the dressing room, and the protection of valuables that are left in the dressing room.

6. **Playing equipment.** -- Playing-equipment questions were related to the fitting of equipment to the individuals, the care and type of equipment used, the requirements of the coaches on protective equipment, and the use and care of equipment by the players.
7. **Training table.** -- Questions relating to the training table consist of the use and advice for a training table, the preparation and the serving of food, the menus used, and regulations regarding the extra servings of food for athletes.

8. **Care of injuries.** -- Questions relating to this topic were on insurance of athletes, the availability of a doctor at daily practice, the provisions for hospital care, X-rays and first aid, the persons responsible for giving first aid and caring for the injured, the policies of the school for provisions for permanently injured athletes, and the accessible facilities for emergency treatment on the practice field.

9. **Training procedures.** -- Questions relative to the training procedures were the orientation of athletes on the policies of the school and future training schedule, the use of movies and visual aids in the teaching of fundamentals for football, and the regulations regarding athletes in training.

After the division of the questions into topical units had been accomplished, the questionnaire was formulated and made ready for a preliminary trial. Before the persons of the coaching field were given the trial questionnaire, they were interviewed and given a sheet of instructions. These persons were asked to answer the questions and to give their reactions to the questionnaire in the following ways:
1. To discard unimportant items.
2. To suggest items of importance that had been omitted.
3. To suggest changes in already existing questions.

The three trial questionnaires were returned; and from the results, the final questionnaire was formed. Questions that were added by the persons who examined the trial questionnaire were used in making the final copy. A few questions were restated for the purpose of clarification so they could be answered in a definite manner. Some questions were omitted when they were found to be irrelevant to the study or to be unnecessary. The questionnaire, after completion, had a title page giving the purpose and the subject on which the questions were written. The second page was a sheet of instructions on how questions were to be answered and a space for the respondent to sign. Then the following pages were divided into nine topics with questions relating to each topic. From the three trial returns of the questionnaire, 102 questions were selected for use in the final questionnaire.

The questionnaires, with a sheet of instructions and a self-addressed stamped envelope, were mailed to the football coaches of the thirteen colleges and universities of Texas which were selected for the study. These institutions were chosen for the following reasons:

1. They were representative schools of Texas.
2. They participate regularly in collegiate football.
3. They are members of either the Southwest Conference or the Lone Star Conference.

In summation, it is recalled that the questionnaire was the method decided upon for obtaining the information for the training and conditioning programs for football.

In the first step, criteria for a questionnaire were set up as a guide in formulating a preliminary and later a final copy of the questionnaire.

The final questionnaire was constructed after the preliminary questionnaire had been studied and revised. The items in the questionnaire were divided into the following topical units:

1. Coaching and training personnel.
2. Training field.
3. Conditioning procedures.
4. Training room.
5. Dressing room.
6. Playing equipment.
7. Care of injuries.
8. Training procedures.

A copy of the final questionnaire (see Appendix) was mailed to the coaches of thirteen selected colleges and universities of Texas. All of the questionnaires were returned and the findings were used in compiling data for use in the following chapters.
CHAPTER III

ANALYSIS OF THE PRACTICES AND POLICIES OF TRAINING AND CONDITIONING PROGRAMS FOR FOOTBALL IN SELECTED COLLEGES AND UNIVERSITIES OF TEXAS

The following data reveal the similarities and differences in the present practices and policies of training and conditioning programs for football in the thirteen colleges and universities selected for this study. These data resulted from a tabulation of responses to questionnaires sent to the coaches of the selected schools.

Coaching and Training Personnel

Ten of the thirteen selected schools were found to have a full-time trainer, and one had a part-time trainer for training duties in athletics. Eight of the ten trainers held degrees, seven held Bachelor's Degrees and one had a Master's Degree. The practical experience of these trainers ranged from three to twenty-one years with an average of nine and one-half years. When a trainer was not provided in the school, the training duties were left up to the coaches and managers in seven of the selected schools.

The number of assistant coaches for football ranged from one to five in the thirteen schools. The average
number of assistant coaches was three for each school. It was revealed that all of the head coaches had conferences with their assistants. When possible, the coaching staff scouted their opponents, and all of the coaches considered scouting opponents essential. The coach who scouted the opponent reported the scout report during lecture periods. Every member of the coaching staff in ten of the thirteen colleges and universities attended a minimum of one coaching school each year.

The number of managers in the thirteen schools ranged from none to six with an average of three managers in each school.

Training Procedures

It was found that in all but one of the thirteen colleges athletes were oriented on the policies of the school and of the future training schedule at an early meeting of the fall training camp. This percentage also held true in the regularity of lecture periods.

All of the schools made movies of their games, which were later used as a training aid along with other visual aids in the teaching of fundamentals and the finer points of football.

Ten of the thirteen colleges had rules that required the athletes to be in bed by a certain hour. All thirteen
coaches agreed on the fact that an athlete should have at least eight hours of sleep each night.

Four of the colleges did not require players to copy plays into a notebook for future study, whereas eight colleges did. One college furnished books containing the plays already diagrammed and in sequence form.

One college had few rules for its athletes to abide by, and three colleges did not require athletes to follow any set pattern of conduct. Nine of the colleges, however, had sets of rules which the athletes were expected to follow.

From the information obtained from the questionnaire, it was evident that all of the coaches believed in giving athletes time to work out minor faults, and they frequently stressed correct blocking and tackling procedures.

Training Field

The training fields of ten colleges and universities were found to be well sodded. All thirteen colleges had a training field separate from the game field, and twelve of the thirteen colleges possessed a water system for the training field. Each college maintained a caretaker for its training field, and eleven of them cared for the field throughout the year. Eight schools did not use the training field for other sports and activities, whereas the remaining five used their training fields for various events.
The dimensions of the training field were found to be the same as those of the game field in all of the colleges, and all but one of the training fields had goal posts. The approximate distance from the practice field to the dressing room ranged from eight yards to six hundred yards, with the average distance from the training field to the dressing room being 156 yards.

Conditioning Procedures

The thirteen coaches required all athletes to undergo health examinations before participation in football training, but only one coach had health examinations given after the football season. Another coach gave health examinations after the football season if such an examination was needed by the individual. Six of the schools keep health charts on each athlete, and in another the health charts were kept by the team physician. Twelve of the schools stressed and encouraged all athletes to practice personal hygiene.

According to the returns of the questionnaire, all thirteen coaches encouraged the athletes to start training on their own initiative before reporting to fall training camp. Eight schools had their conditioning exercises led by specific persons or players, and the length of the period for conditioning exercises varied throughout the season in eight schools. Although all schools advocated thorough exercising of joints during calisthenics, only
eleven schools increased calisthenics on cold days to prevent injuries. The thirteen schools used proper conditioning procedures for injured athletes, and required athletes who arrived late for practice to do warm-up exercises before participating in drills or scrimmage. The approximate number of hours used for calisthenics per week ranged from one-half to two and one-half hours. The average time used for calisthenics per week was approximately one hour and thirty minutes.

In the early season, one coach saw value in giving more time for scrimmage, while another coach depended upon the amount of time needed. The range of time devoted to scrimmage in eleven schools was from two to five hours per week, the average time being three hours per week. One school spent thirty minutes on blocking and tackling drills for backs and one hour for the line, while another school depended upon the amount of time found necessary. The variation of the time used for blocking and tackling drills was one and one-half to six hours per week, the average time being three and one-third hours per week.

All of the schools preferred certain calisthenics for conditioning exercises; and out of the eighteen exercises listed, fourteen of them were used by a majority of the schools. Following is a list of the fourteen exercises used, and the number of schools that used each:
1. Half-knee bend ........ Nine schools
2. Full knee bend ........ Eight schools
3. Four count exercise .... Eight schools
4. Stationary running .... Nine schools
5. Bicycle ride .......... Eleven schools
6. Hurdle exercise ....... Eight schools
7. Push-ups .............. Thirteen schools
8. Grass drill ............ Twelve schools
9. Side straddle .......... Ten schools
10. Pull out and check block .. Ten schools
11. Protecting passer .... Ten schools
12. Cutting off line backer .. Nine schools
13. Mouse trap drill ....... Ten schools
14. Spinning out ........ Nine schools

Training Room

There was a training room for football athletes in all thirteen colleges; and in twelve of these, the training room was separate from the dressing room.

Among the sixteen items listed as training-room equipment, the majority of the schools had thirteen of these items in their training rooms. Many of the schools had extra items such as a bathtub, a movable light of extra brilliance, a diathermy, a depolaray, and a galvanic sinusoidal machine. Following is a list of the items that the majority of the schools used in their training rooms:
1. Supply cabinet.
2. Stretcher.
3. Wash basin.
4. Towel racks.
5. Waste receiver.
6. Razor or electric clippers.
7. Training tables.
8. Work tables.
10. Rubber mats.
13. Adequate first-aid kit and supplies.

In eleven of the schools, the training rooms were well ventilated; and there was hot and cold running water available in each room. The training room was cleaned daily, and some person was held responsible for training-room supplies and equipment in each of the thirteen colleges.

Dressing Rooms

In all but two of the schools, the training quarters contained a locker or a basket system in which to store training uniforms.

There were sufficient windows for air circulation in the dressing rooms, and the shower and dressing room were cleaned daily in all of the colleges. Four of the colleges
used their dressing rooms for purposes other than sports.

All thirteen schools furnished soap and towels, and
gave care for the prevention of athlete's foot.

All of the dressing rooms could be heated satisfac-
torily during cold weather. There was a sufficient supply
of hot water to take showers in all but one of the dress-
ing rooms. Only one college did not have a sufficient num-
ber of showers.

All of the schools provided the necessary racks for
hanging up the street clothes of athletes; and in twelve
of the colleges, mirrors have been conveniently placed to
enable athletes to groom their hair before leaving the dress-
ing room.

Six of the schools indicated that they provide protec-
tion for valuables left in the dressing room. Three of the
schools furnish other forms of protection for valuables,
whereas four of the schools do not furnish any protection.

Care of Injuries

A doctor has been made available and within easy reach
of every football practice session in all thirteen schools,
and eight of these have school hospitals that provide care
for injured athletes. Nine colleges have made provisions
for emergency treatment on the field, and eleven of them
have stretchers available for carrying athletes who seem
to be seriously injured. X-rays were taken of injuries in
all thirteen colleges when there was a possibility of broken bones, and ten of the schools have facilities accessible adjacent to the practice field for treatment of athletic injuries. Eleven of the schools have trainers who have had special training in first aid and care of the injured. Six schools required their trainers to attend training clinics. However, in all cases first aid was administered by a qualified person when an injury did occur. Five of the schools had coaches who had training in first aid.

Two of the thirteen schools were found to have insurance for their athletes; eleven schools provided medical care for an athlete who had been permanently injured; and ten schools made provisions for an athlete throughout his school career if, during a practice session or a game, he should have received a permanent injury.

Playing Equipment

All thirteen colleges issued equipment to fit the individual, and twelve of them attempted to build a desirable attitude in the athlete's mind concerning the care of his equipment.

Equipment such as "T" shirts, athletic supporters, jerseys, and socks were washed daily in eleven of the schools. Nine of them provided equipment for cleaning and washing football gear.
All schools cleaned, oiled, and reconditioned usable equipment for use the next season.

Eleven coaches used charging sleds and dummies for blocking and tackling practice; however, one of the remaining coaches used only the charging sled.

Players were required to wear protective equipment such as hip pads, rib pads, shoulder pads, jockeys, and headgear in thirteen colleges; and twelve schools educated the athletes to check their own equipment daily for defaults.

All coaches used plastic headgear; nine of them believed the plastic headgear proved more practical than leather headgear.

Eleven schools had policies which required all athletes to turn in their equipment in an orderly fashion. Twelve schools stated that their athletic equipment was stored so that it would be dry for the next practice session.

Training Table

Only one school provided a training table for athletes for lunch and dinner, and nine others had a regular training table.

All but one of the coaches thought it was advisable to have a training table and have all athletes eating together in the same unit.

The food, in eleven of the schools, was prepared by professional dieticians, and there were special menus made
in nine of the training-table programs to meet the various situations. Only four of the schools served food cafeteria style.

In seven of the training-table programs the training table was a separate unit from other school eating units.

Eleven of the schools permitted athletes to have extra servings of food and drink.

Summary

The preceding information was based on the findings of the questionnaire, and revealed the similarities and differences of the present practices and policies of training and conditioning programs for football in the thirteen colleges and universities selected for this study. In order to show the present practices and policies, the material was divided into nine topical units. Each unit has shown the present practices and policies of the thirteen schools. From these data the fourth chapter, a proposed training and conditioning program for football in colleges, was constructed.
CHAPTER IV

A PROPOSED TRAINING AND CONDITIONING PROGRAM
FOR FOOTBALL IN COLLEGES

In summation, it should be recalled that the purpose of this study was to analyze the practices and policies used in the training and conditioning programs for football in thirteen selected colleges and universities, and to recommend a training and conditioning program for football in colleges based on the findings of the study.

This program included several distinct topics of organization. These topics were the following:

1. Coaching and training personnel.
2. Training procedures.
3. Conditioning procedures.
4. Training field.
5. Training room.
6. Dressing room.
7. Care of injuries.
8. Playing equipment.

The proposed program is presented in a concise manner suitable for use by coaches and students preparing for the coaching profession.
Coaching and Training Personnel

It is desirable to have a full-time trainer with a degree and practical experience. It is possible for a trainer to obtain practical experience as a student in college while working with the varsity teams. If a trainer is not provided, the coaches and managers should be prepared to carry out the training duties.

Three assistant coaches is the desirable number to have on an average college coaching staff for football. The head coach should have frequent conferences with his assistants in discussing individual athletes, as well as team activities and strategy. It is essential to scout opponents, and if possible, one of the coaching staff members should do the scouting. The coach who does the scouting is the most logical person to make the scout report during regularly held lecture periods. Every member of the coaching staff should attend, if possible, a minimum of one coaching school each year.

It is desirable to have at least two managers to carry out the duties prescribed by the coaches for the managers.

Training Procedures

At an early meeting during the fall training camp, it is advisable to orient athletes on the policies of the school and of the future training schedule. In addition, any change
in the policies of the school or of the training program should be explained at the next called lecture period.

It is advisable for colleges to make motion pictures of their games to use as a training aid, along with other materials that are used in training athletes to play football.

All athletes should be required to be in bed at a certain hour, in order to obtain the minimum of eight hours of sleep each night.

Coaches should furnish books of plays or require athletes to copy football plays into a notebook for future study.

A set of training rules should be established by the coaching staff for the athletes to follow.

Coaches should frequently stress correct blocking and tackling procedures and give athletes time to work out minor faults.

**Training Field**

A desirable training field for football is one well sodded and separate from the game field. The training field should have a water system for watering the playing area. The training field should be cared for throughout the year by a person who has been designated as caretaker of the field.
If other playing areas are provided, the training field should not be used for other sports and activities. It should have goal posts with approximately the same dimensions as the game field. In an ideal situation the distance of the training field from the dressing room should not be more than 160 yards.

Conditioning Procedures

Since football requires strong, healthy individuals, health examinations should be required of all athletes before participation in football training. These examinations may be given after the football season; however, the policies of the school and the individuals involved must be considered. Keeping health charts on athletes is advisable, but it was not strongly stressed in the findings of this study. Only seven of the schools kept health charts on their athletes, which is fifty-four per cent of the total schools selected for the study.

Coaches should stress and encourage all athletes to practice personal hygiene.

Athletes should be encouraged by the coaches to begin training on their own initiative before reporting to the fall training camp so they will be more physically fit to withstand the strenuous demands required of them.

The conditioning exercises should be led by coaches or
selected players, and the period for calisthenics should last approximately twenty minutes per day. The athlete's joints should be thoroughly exercised during calisthenics, and on cold days the intensity of calisthenics should be increased to prevent injuries. Proper conditioning procedures should be used in re-conditioning athletes with injuries.

Late arrivals for practice should be required to do a series of warm-up exercises before they are allowed to participate in drills or scrimmage, since an athlete is less likely to incur injury if his physical body is loose and functioning properly.

In the findings of the study the amount of time devoted to scrimmage should be approximately three hours per week. Time used for blocking and tackling drills should also be approximately three hours per week.

The following seven drills were found to be the exercises most desirable to use in conditioning athletes for football:

1. Push-ups.
2. Grass drills.
4. Side straddle.
5. Pull out and check block.
7. Mouse trap drill.
Other exercises are advisable to use but are less desirable to a degree than the preceding ones. These exercises are as follows:

2. Stationary running.
3. Cutting off line backer.
4. Spinning out.
5. Full-knee bend.
6. Four count exercise.

Training Room

The school should provide a training room separate from the dressing rooms for football athletes. The training rooms should contain the following items as minimum requirements:

1. Supply cabinet.
2. Stretcher.
3. Wash basin.
4. Towel racks.
5. Waste receivers.
6. Razor or electric clippers.
7. Training tables.
8. Work tables.
10. Rubber mats.
13. Adequate first-aid kit and supplies.

The following items represent other equipment which is desirable but not necessary for training rooms:

1. Bath tub.
4. Depolaray machine.
5. Galvanic sinisodium machine.

Well-ventilated training rooms which have hot and cold running water are almost a necessity. There should be a person in charge of training-room supplies and equipment at all times. The training room should be thoroughly cleaned each day.

Dressing Room

Good ventilation in the dressing room is necessary so that the equipment and clothing can get plenty of fresh air. There should be some type of locker or basket system in which the equipment can be stored between practice sessions.

The dressing and shower rooms should be cleaned daily. They also should have sufficient windows to permit fresh air to circulate freely. The dressing room should be heated properly during cold weather and the hot-water supply should
be sufficient for all athletes to take a good shower. In order to maintain high morale among the athletes, it is advisable to have a sufficient number of showers, otherwise they may become disgruntled at having to wait in line for their shower, or, still worse, leave the dressing room without taking a shower.

Soap and towels should always be furnished by the school and precautions, in every way possible, should be taken to safeguard the athletes from athlete's foot.

Schools should provide necessary racks or lockers for the men to have a place to hang their street clothing. Adequate protection also should be provided for valuables left in the dressing rooms while athletes are on the practice field.

Mirrors should be placed in convenient locations in the dressing rooms so that all athletes may check their personal appearance before leaving the dressing room.

Care of Injuries

It is desirable to have a doctor available at games and within easy reach of every practice session. If possible, there should be a college hospital which can adequately care for injured athletes. It is advisable to have facilities adjacent to the training field to care for injuries that occur during practice. These facilities should
be in charge of a member of the staff who possesses qualifications to administer first aid.

Schools should provide medical care for an athlete who is permanently injured during practice or in a game. Provisions should also be made by the school for an athlete to finish his school career if he obtains a permanent injury while in practice or in a game.

Playing Equipment

Every athlete should be issued football equipment which fits him well. It is then advisable to acquaint him with the proper methods of care for this equipment.

A system should be established for cleaning and washing football equipment. Washable items such as "T" shirts, athletic supporters, jerseys, and socks should be washed daily.

All usuable equipment, when not in use, should be cleaned, oiled, and reconditioned. This type of care will lengthen the wearability of the equipment with the result that, in turn, the expense of upkeep will be lowered.

It is advisable to use charging sleds and dummies for blocking and tackling practice. This equipment may be purchased from sporting goods companies or constructed in the school workshop, but in either case it should be cared for properly because quite often it becomes an expensive item if not used wisely.
In order to prevent injuries, players should be required to wear protective equipment. This protective equipment should be checked daily by the individual wearing it for defaults. A broken shoulder pad can cause a "knocked down" shoulder, and other faulty equipment can produce other equally serious and painful injuries.

Since all of the schools involved in this study used plastic headgear, one may conclude that this type of headgear should be used in any program of football training and conditioning. Especially is this true when sixty-nine per cent of the coaches questioned stated that plastic headgear was found more practical than leather headgear.

Athletes should turn in their equipment in an orderly fashion so as to help eliminate "horse play" and friction among players. This equipment should be placed in such manner as to permit sufficient circulation of air at all times. If this is practiced, the equipment will be dry by the next practice session.

**Training Table**

It is advisable to have a regular training table separate from other school eating units, and to require all athletes to eat together in the same unit.

Food should be prepared by a professional dietician, and special menus should be prepared to meet the various situations. It was found in the study that food was not
served cafeteria style by the majority of the schools. However, this does not mean that a school should be without a training table if it lacks facilities for serving food in family style.

When it is possible, athletes should be permitted to have extra servings of food or drink so as to replenish the energy used in practice.

**Summary**

The proposed training and conditioning program for football in colleges presented in this chapter was based on the findings of this study. By separating the program into nine topical units, an attempt was made to present material in a concise manner. In relation to each topic the findings showed what was advisable in regard to a training and conditioning program for football. This recommended program may be used by coaches and students preparing for the coaching profession.
APPENDIX

QUESTIONNAIRE FOR A PROSPECTIVE THESIS
ON THE TRAINING AND CONDITIONING
PROGRAMS FOR FOOTBALL
INSTRUCTIONS FOR ANSWERING QUESTIONNAIRE

1. All questions can be answered with a yes, no, a number or a check mark.

2. For your convenience there is a blank at the left-hand side of each question for your answer.

3. After the last question on each page there is space for additional questions and answers if you have some in mind that you would like to add.

Respondent: ____________________
1. Is there a full-time trainer for football?
2. Does the trainer hold a degree?
3. What degree is held by the trainer?
4. How many years of practical experience does the trainer have to his credit?
5. How many assistant coaches are there?
6. How many managers and assistant managers are there?
7. Are the training duties left up to the coaches and managers if there is no trainer?
8. Do the head coach and assistants have conferences?
9. If possible, are opponents scouted by the coaching staff?
10. Does the scout who scouts the opponents present the scout dope at skull practices?
11. Do you consider scouting opponents essential?
12. Does every member of the coaching staff attend coaching school?

Add others:
1. Are athletes oriented to the policies of the school and the future training schedule at an early meeting of fall training camp?

2. Are skull practices held regularly?

3. Are visual aids used in the teaching of fundamentals and the finer points of football?

4. Are movies made of games?

5. Are the movies used as a training aid?

6. Are athletes required to be in bed at a certain hour?

7. Do you think that an athlete should have at least eight hours of sleep per day?

8. Are players required to copy plays into a notebook for future study?

9. Are athletes required to abide by a set of training rules?

10. Are correct blocking and tackling procedures stressed frequently?

11. Are athletes given time to work out minor faults?

Add others:
CONDITIONING PROCEDURES

1. Are athletes required to undergo health examinations before participation in football training?

2. Are health examinations given after the football season?

3. Are athletes encouraged to start training on their own before reporting to fall training camp?

4. Are conditioning exercises led by specific players?

5. Is the length of the warm-up period the same throughout the season?

6. Are health charts kept on each athlete?

7. Is personal hygiene stressed and practiced?

8. Are the same calisthenics used over and over every day?

9. On cold days are calisthenics increased to prevent injuries?

10. Are all joints thoroughly exercised during calisthenics?

11. Are proper conditioning procedures used for injured athletes with the following injuries?

   b. Sprained ankle.  e. Knee injury.

12. Are athletes who arrive late for calisthenics required to do warm-up exercises before practice drills or scrimmage?

13. Give the approximate number of hours used for scrimmage each week.

14. Give the approximate number of hours spent on blocking and tackling drills each week.
15. Give the approximate number of hours used for calisthenics per week.

16. Are certain calisthenics preferred for conditioning exercises? Check the exercises you prefer:

a. Lifting the weights.
b. Half knee bend.
c. Full knee bend.
d. Four count exercise.
e. Duck waddle.
f. Russian dance.
g. Stationary running.
h. Bicycle ride.
i. Hurdle exercises.
j. Pushups.
k. Grass drills.
l. Side straddle.
m. Pull out and check block.
n. Protecting passer.
o. Cutting off line backer.
p. Mouse trap drill.
q. Spinning out.
r. Rodeo.

Others you prefer:

Add others:
TRAINING FIELD

1. Is the training field well sodded?

2. Is there a training field separate from the game field?

3. Does the training field have a water system to keep the ground moist and the grass growing?

4. Is there a caretaker for the training field?

5. Is the training field used for other sports and activities?

6. Is the training field free of obstacles that could cause injury to the athletes?

7. Is the training field cared for throughout the year?

8. Is the training field lined with the same dimensions as the game field?

9. Does the training field have goal posts?

10. Is the training field close to the dressing room?

11. Give the approximate distance of the practice field from the dressing room.

Add others:
TRAINING ROOM

1. Is there a training room for football athletes?

2. Is the training room separate from the dressing rooms?

3. Do you have most of the training room equipment listed below in your training room? Check the items that are used in your training room:
   a. Supply cabinet.
   b. Stretcher.
   c. Bathtub.
   d. Wash basin.
   e. Towel racks.
   f. Waste receivers.
   g. Razor or electric clippers.
   h. Training tables.
   i. Work tables.
   j. Heating lamps.
   k. Movable light of extra brightness.
   l. Rubber mats.
   m. Whirlpool bath.
   n. Powder box for foot baths in powder.
   o. Adequate first-aid kit and supplies.
   p. Shower.

   Other items:

4. Is the training room well ventilated?

5. Are there hot and cold running water available in the training room?

6. Is someone responsible for training-room supplies and equipment?

7. Is the training room cleaned daily?

Add others:
DRESSING ROOMS

1. Are dressing and shower rooms cleaned daily?
2. Do the training quarters contain a locker or basin system?
3. Are there sufficient windows for air circulation in the dressing room?
4. Are dressing rooms used for other purposes or sports?
5. Are soap and towels furnished?
6. Is care given for the prevention of athlete’s foot?
7. Can the dressing room be heated sufficiently during cold weather?
8. Is there a sufficient number of showers?
9. Is there a sufficient supply of hot water for all athletes to take a shower?
10. Are mirrors conveniently placed so athletes can comb their hair before leaving the dressing room?
11. Are there plenty of racks for hanging up street clothing?
12. Are valuables left in the dressing room protected?

Add others:
CARE OF INJURIES

1. Is there a doctor within easy reach of every practice session?

2. Are athletes insured?

3. Does the school have a hospital that provides care for injured athletes?

4. Are X-rays taken of injuries when there is a possibility of broken bones?

5. Is first aid given by a qualified person when an injury does occur?

6. Has the trainer had special training in first aid and care of the injured?

7. Is the trainer required to attend training clinics?

8. Are players who seem to be seriously injured carried from the playing field on a stretcher?

9. If the coaches are acting as trainers, have they had training in first aid and care of the injured?

10. Are provisions made for medical care for an athlete who is permanently injured?

11. If during practice or a game an athlete receives a permanent injury, are provisions made for him throughout his school career at your college?

12. Are provisions made for emergency treatment on the practice field?

13. Are facilities accessible for treatment of athletic injuries adjacent to practice field?

Add others:
PLACING EQUIPMENT

1. Is equipment issued to fit the individual?

2. Is the equipment cleaned, oiled, and reconditioned for use the next season?

3. Are "T" shirts, jerseys, jockeys, and socks washed daily?

4. Does the school provide equipment for cleaning and washing football gear?

5. Are charging sleds and dummies used for blocking and tackling practice?

6. Are players required to wear protective equipment such as hip pads, rib pads, shoulder pads, jockeys, and headgear?

7. Are athletes educated to check their own equipment daily for defaults?

8. Are plastic headgears used?

9. Do you think that plastic headgears are more practical than leather headgears?

10. Is athletic equipment stored so that it will be dry for the next practice session?

11. Are all athletes required to turn in their equipment in an orderly fashion?

12. Is there a desirable attitude built in the player's mind concerning the care of his equipment?

Add others:
1. Is there a training table provided for athletes?

2. Do you think it is advisable to have a training table?

3. Is the food prepared by a professional dietician?

4. Are special menus made to meet the various situations?

5. Is the food served cafeteria style?

6. Is the training table separate from the other school eating units?

7. Are athletes permitted to have extra servings of food or drink?

8. Do you want all the athletes eating together in the same unit?

Add others:
BIBLIOGRAPHY

Books


Articles
