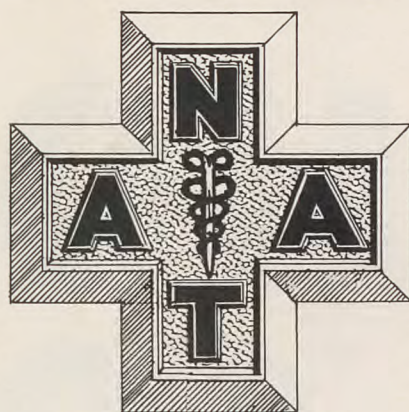


The

AUGUST 1962

**J
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OF THE
**NATIONAL
ATHLETIC TRAINERS
ASSOCIATION**



14th ANNUAL MEETING

CINCINNATI, OHIO, JUNE 9, 10, 11, 12, 1963

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THE JOURNAL OF THE NATIONAL ATHLETIC TRAINERS ASSOCIATION

The official organ of the National Athletic Trainers Association is published four times yearly. Communications regarding articles should be addressed to:

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THE SECRETARY'S REPORT

Thirteenth Annual Meeting of National Athletic Trainers Association

The thirteenth annual meeting of the National Athletic Trainers Association was held in the general assembly room at the Western Skies Motel, Albuquerque, New Mexico. The meeting was called to order at 4:00 P.M. by Chairman of the Board, Weaver Jordan.

The roll call was dispensed with.

The Minutes of the 1961 meeting at Madison, Wisconsin, were approved without being read. The report of the Board of Directors' second meeting was approved without being read.

The treasurer's report was approved as distributed.

Report of the Chairman of the Board of Directors:

1. The Chairman of the Committee on Committees gave a combined report of all of the Standing Committees.
 - a. Membership—Bill Linskey, Chairman—No report.
 - b. Code of Ethics—Howard Waite, Chairman—No violations or infringements. Suggestion: We all should be very vigilant and alert in the handling of head injuries in football. Due to adverse publicity from some quarters, the public and press have become alarmed, and if we are lax in our methods and procedures, we are apt to be justly criticized.
 - c. Twenty-Five Year Awards—Porky Morgan, Chairman—No report at this time.
 - d. Honorary Membership and Awards—Walt Bakke, Chairman—No report.
 - e. Injury—Ken Rawlinson, Chairman—
 1. The injury committee made the following recommendations through Bill Newell to the A.M.A. Committee on the medical aspect of sports at their annual meeting in Denver on November 26, 1961.
 - A. A physical examination shall be given yearly to every boy and girl starting at age 9. The results of these physical examinations be made a part of each individual's scholastic record.
 - B. The doctor in attendance recommend that a post-mortem be done on every athlete following a death related to athletics.
 2. The injury committee was asked to conduct a survey for unpublished material dealing with athletic training. The committee was not wholeheartedly in agreement with the proposal, so the project was dropped.
 - f. Constitution and By-Laws—Report was made by Chuck Medlar, Chairman.
 - g. Publicity—No report.
 - h. Exhibits—Warren Ariail, Chairman—We have thirty exhibitors for this years meeting. This equals last years meeting which was an all-time high. Warren wishes to personally commend Bill Newell, Tow Diehm for their help and full cooperation. Suggestions: I had sent reservation cards and hotel brochures to Warren for the exhibitors but his feeling is that it isn't necessary to send this information out to the exhibitors as they handle their reservations and information themselves.

- i. Registration—Joe Blankowitsch, Chairman—Everything is ready for the National meeting.
- j. Professional Journals—Art Dickinson, Jr., Chairman—One article written by an Athletic Trainer will be published in the AAHPER Journal this spring and another had been submitted. Articles by Aaron J. Weiss, Ph.D. and W. W. Hall, M.D., are presently being written.

A bibliography of all articles appearing in the AAHPER Journal in recent years, relating to Athletic Training, has also been compiled.
- k. Scientific and Educational Exhibits—George Sullivan, Chairman—No report, since we have no exhibits in this category this year.
- l. Program—L. F. "Tow" Diehm, Chairman—I would like to thank the Board of Directors, Bill Newell, Warren Ariail, and Joe Blankowitsch, for their wonderful support and cooperation in the past year. The N.A.T.A. is not only growing in membership but also in stature. I sincerely believe that if we give the membership a program each year that maintains a "balance" in regard to speakers such as Doctors, Professional Trainers, College Trainers and High School Trainers, we will continue to increase our attendance at the national meeting. Suggestions: I would like to recommend that the Board of Directors establish a budget for the program committee to work with. It is very difficult to obtain competent speakers outside of the organization without paying them, in many instances. This is only one of the problems the committee faces; there are such items as postage, telephone calls, program printing, audio-visual equipment rentals and operators, to mention some of the necessary "convention expense items."

It was moved and seconded that the report of the Chairman of the Committee on Committees report be approved.

2. The Special Committees and representatives were heard.

The Association was represented at the following National Meetings and Conferences:

- a. AMA's Committee on the Medical Aspects of Sports Conference, Denver, Colorado.
- b. NCAA's annual meeting, Chicago, Illinois.
- c. AAHPER's Conference on Professional Preparation, Washington, D. C.
- d. United States Olympic Association Meetings, Washington, D. C.
- e. American College Health Associations Annual meeting, Chicago, Illinois.
- f. AAHPER's annual meeting, Cincinnati, Ohio.
- g. AAHPER's Committee on the Health Aspects of Sports meeting, Cincinnati, Ohio.
3. Other new business as heard by the Board was approved as recommended.
 - a. The Advancement Committee proposed that the present active membership, in view of what has been accomplished at the recent AAHPER Professional Preparation Conference, be given Association Certification by June 1963. That anyone becoming active by June 1968 would be included under this "Grandfather clause" and all after that date would have to meet proper qualification as set forth by the action of the active membership in approving the Athletic training program, June

Continued on page 3

SECRETARY'S REPORT

(Continued)

1959 and the recent qualifications as set forth in the actions of the AAHPER Professional Preparation Conference.

- b. The Nominating Committee to the Helms Hall of Fame presented a letter directed to Mr. W. R. Schroeder, Director, Helms Hall of Fame, listing a group of 25 names as the initial list for the Athletic Trainers Hall of Fame. A letter from the Director of Helms Hall to the Chairman of the Committee stated that action on the proposed Hall of Fame had been delayed until August this year. The Board directed the Secretary to write a letter to Mr. Schroeder listing some objections to the proposed Hall and to present a better explanation of the N.A.T.A. membership classification.
- c. Duke Wyre, N.A.T.A. Representative to the USOA gave a report of the quadrennial meeting, Washington, D. C., December 4th and 5th.
- d. Frank Cramer, Member of the Selection Committee for Medical Doctors, Trainers and Nurses, requested that the Board present to him before the close of our program nominations for the summer and winter olympics and the Pan American Games.
- e. Ernie Biggs represented the Association at the AMA Committee on the Medical Aspects of Sports Conference on protective head gear in athletics has a report of that meeting that will be mimeographed and sent to the membership.
4. These proposals were presented for consideration:
 - a. That next year the Program Chairman introduce his addresses of welcome starting at 9:30 A.M. and that the National Business meeting will follow at 10:00 A.M. with the actual program starting at 1:00 P.M. on the first day.—Approved.
 - b. That the National program chairman, starting next year, be assured of a minimum of \$800 to use in program planning to aid in his providing the best possible speaker and panel talent obtainable. Most of this minimum can come from the registration fees. This minimum can be increased as the attendance at national meetings becomes larger.—Approved.
 - c. It was proposed that the Association next year have an Annual Banquet and Cocktail Party rather than a Buffet Dinner as we have been doing.—Approved.
 - d. That the reports of the special Committees be finalized whenever possible by March 15th of each year that they might be included in this report. Special Committees only report to the Board of Directors and are usually reports of recommendation that must be given more consideration than time permits at the annual meeting. The Chairman of the Committee on Committees could still present the recommendations in proper procedure for appropriate action.—Approved.
 - e. The selection of future National Meeting sites Committee presented a guideline through 1984. The Committee has voiced approval to a plan of holding the majority of the meetings in the Mid-West in a few large cities and going every fourth year to an area that travel has made it difficult for some of the membership to attend. Considerations of geographic locations would still be

retained. The proposed sites should be selected this far in advance on a tentative basis—requiring official Board of Directors approval only two years in advance. The Committee presents for your consideration the following specific tentative sites:

1965 Chicago	1975 Chicago
1966 Kansas City	1976 Miami Beach
1967 Columbus	1977 Cincinnati
1968 Houston	1978 Kansas City
1969 Cincinnati	1979 Chicago
1970 Chicago	1980 New York
1971 Kansas City	1981 Kansas City
1972 Baltimore	1982 Columbus
1973 Columbus	1983 Cincinnati
1974 Kansas City	1984 Denver

- f. Nominations were received for the 1963 and 1964 National Meeting Sites. Baltimore presented by Ed Block, Baltimore Colts, 1963, 64, and 65. Palo Alto, California, presented by Con Jarvis, Stanford University, 1964. Rusty Payne again presented Lexington, Kentucky or Cincinnati for 1963. Miami University, Oxford, Ohio, was presented for Jay Colville.
- g. It was decided that the National Meeting Site for 1963 be Cincinnati. Palo Alto for 1964.
- h. Paul German discussed with the Board an area of cooperation participated in this past year by the Board in judging essays submitted by high schools. A plan was outlined as to the finalization of the judging and the press release.
- i. Marshall Cook, Director, District 7, presented a request of transfer of Idaho State College, Pocatello, Idaho, from District 8—NATA—to District 7—NATA. A similar request was presented by Mel Blinkenstaff, Director, District 4, for Ed Prelaz, Marshall, District 3.
- j. These men were appointed or reappointed for three year terms to the following committees:
 - Injury Committee—to 1965
 - Ken Rawlinson, University of Oklahoma—Chairman
 - Ed Block, Baltimore Colts
 - Constitution By-Laws Committee
 - Chuck Medlar, Penn State University—Chairman
 - 25 Year Awards Committee
 - Porky Morgan, Kansas State—Chairman
 - Honorary Membership and Awards
 - Walter Bakke, University of Wisconsin—Chairman
 - Membership Committee
 - Nasby Rhinehart, University of Montana
 - John Sayers Miller, Jr., Ball State
 - Carl Nelson, Colby College
 - Code of Ethics
 - Buck Andel, Georgia Tech, Chairman
 - Roger McGill, University of Pittsburgh
- k. The Board of Directors for the coming year:
 - District 1—Mike Linkovich, Bowdoin College
 - District 2—Joe Abraham, Hobart College
 - District 3—Robert L. Martin, Wake Forest College
 - District 4—Tom Healion, Northwestern University
 - District 5—Ted Ballard, Tulsa University
 - District 6—Tom Wilson, University of Houston

Continued on page 4

SECRETARY'S REPORT

(Continued)

District 7—Marshall Cook, Montana State
 District 8—Jim Van Dusen, University of
 California

District 9—Wes Knight—University of Mississippi

1. It was decided that the NATA Medal annually presented to our guest speakers become known as the Board of Directors Medal.

The report was moved for approval, seconded and carried.

COMMITTEE REPORTS**Memorial Resolutions:**

It was pointed out that although "Brick" Mueller, M.D., was not an active member of the Association, he was a beloved friend of athletics. Dr. Mueller passed away during the year. One minute of silence was observed in honor of the deceased.

Twenty-five Year Award:

Laurence Morgan, Chairman, presented one member for Award. The recipient was Wesley Knight, University of Mississippi, for twenty-seven years. This was greeted with a standing ovation.

United States Olympic Association:

Representative Duke Wyre presented his report as distributed.

Chairman Jordan presented the Medal of the Board of Directors to Tom Healion, 1961 Program Chairman and Warren Ariail, 1961 Exhibits Manager.

A standing ovation was given to "Tow" Diehm, Chairman and Warren Ariail, Exhibits Chairman, for a job very well done.

Weaver Jordan presented the new Board of Directors.

Tom Healion, Northwestern University, was presented the Association gavel as the new Chairman of the Board of Directors.

Rusty Payne was presented as the next National Program Chairman. Next years meeting is to be held in Cincinnati, Ohio.

Joe Blankowitsch was given a hand for his handling of the registration desk.

Chairman Healion presented an award to Weaver Jordan, past chairman of the Board of Directors, and expressed the Association's appreciation for the conducting of the national business through the past year. This was received with a standing ovation.

Having no further business before the floor, the meeting was adjourned at 4:50 P.M.

William E. Newell, Executive Secretary

SECOND BOARD OF DIRECTORS MEETING

Western Skies Motel
 Albuquerque, New Mexico

The Second Board of Directors meeting was called to order by Weaver Jordan presiding. Tom Healion, Chairman of the Board was unable to attend.

The first order of business concerned the Helms Foundation's athletic trainers Hall of Fame. This was discussed at length. It was then proposed that other associations be surveyed as to their relationship with the Helms Foundation as a guide line for the future.

Next year's association dinner plans were discussed. It was decided that a suitable site be selected to include the cocktail party and also appropriate for the wives of members and guests.

The chairman of the board will act as association dinner chairman.

The problem of complimentary tickets for the dinner was discussed. It was decided that speakers or panel members within the profession should not be included as guests of the association. The complimentary list should include guest speakers, guests, and members of press, television, and radio.

The Professional Advancement Committee was instructed to begin implementation of the Association Certification program.

It was decided to continue the NATA Book-ends as an award.

Rusty Payne was heard concerning next year's program.

It was decided that educational and scientific exhibits should pay an exhibiting fee—at the same rate as the commercial exhibits.

It was proposed that a reporting service be hired for the next national program and that the cost be added to the registration fee.

A special committee will be appointed to advise the Board in matters pertaining to professional athletics. Membership of the Committee will include a representative of each of the existing leagues in professional football, baseball, basketball, and ice hockey in the United States and Canada. Appointments will be approved at the next annual meeting of the board.

It was suggested that the registration desk keep a directory of each registrant's room number and hotel. This can be made available in mimeograph form.

There being no further business the meeting stood adjourned.

William E. Newell, Executive Secretary

N.A.T.A. TREASURER'S REPORT

May 15, 1962

Balance on hand June 1961..... \$2026.96

Deposits:

Dues	\$2061.00
Sale of Pins and Emblems.....	64.50
National Meeting Surplus.....	2000.00
1961 Registration Fees.....	132.00
Journal Advertisements	602.00
Journal Subscriptions	136.00 4995.50

Disbursements:

Lafayette Mailing Service.....	328.92
Journal (3 issues)	1448.80
registration card, membership applications, change of address card, envelopes, convention mailings	
Secretarial Expenses	2115.03
salary, trips, secretarial work	
Subscription Manager's Revolving Fund	54.00
Dues to Affiliate Associations.....	50.00
NCAA, USOA	
Office Supplies	491.40
membership cards, stationery, postage, envelopes, certificates, speed letters	
National Meeting Expenses	349.30
Miscellaneous	280.40 5117.85
badges, programs, medals, lawyer, emblems, gavel, scrapbook, convention material	

Continued on page 6



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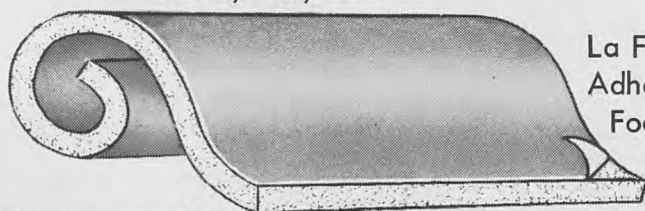
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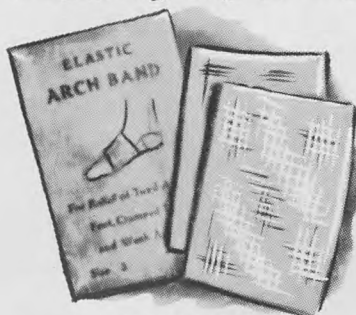
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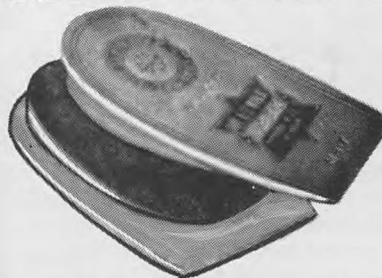
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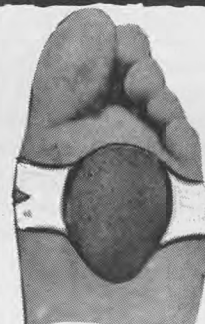
E-Z Walk Tongue Pads



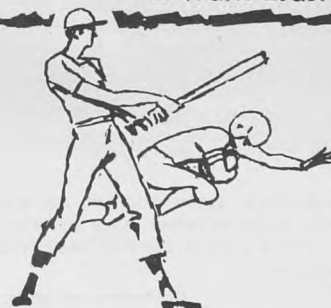
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TREASURER'S REPORT

(Continued)

Balance on hand	1904.61
Checks not cancelled	3.00
	29.87
	13.26
	457.65
	59.98
	50.00
	75.00
	27.80
Certified Statement from Bank	\$2621.17
N.A.T.A. Membership—1962	
Active	326
Associate	164
Allied	20
Advisory	112
Honorary	6
Retired	2
Total	630

FUNCTIONAL ISOMETRIC CONTRACTION EXERCISE

by MARTY BROUSSARD
Head Athletic Trainer
Louisiana State University

Coaches and trainers are constantly trying to improve their teaching and training techniques. A few years ago, after much debate, it became evident that Isotonic (weight lifting) under proper supervision could be of extreme value in over-all development of our athletes. Through the efforts of men like Bob Hoffman, of Hoffmans Barbell Company, Dr. Francis Drury, Professor of Physical Education at L.S.U., and Alvin Roy, former weight lifting coach of the U. S. Olympic Teams, resistive weight exercises became a major part of training techniques all over America.

Recently, through the efforts of these same dedicated men a new method of developing strength and explosive power has become very popular. The method is referred to as Isometric Contraction. Sometimes referred to as static or tonic contraction it is contracting a muscle partially or completely without changing its length.

Functional Isometric Contraction ("FIC") then is a method of developing functional strength through static contraction of the muscles in the position the muscles are to be used, whether it be football, basketball, track or golf. This type of contraction may be performed under 3 lengths or degrees of the muscle or joint (1) at full length (2) at intermediate (middle) length, and at (3) minimum length.

Research has proved that a muscle will gain in the following ways through static contraction.

1. Gain endurance (more fuel available, greater food stored and more oxygen available.)
2. Proper chemical changes (increase in glycogen and phosphocreatine.)
3. Easier transmission of the nerve end plate impulse to muscle.
4. More complete use of all fibers (motor units.)
5. Capillary increase (up to 40% more capillary development.)

Through these changes the muscle will become larger,

tougher, and stronger. Add your running and agility drills to this program you will definitely see an over-all improvement.

This new method brings together all the known scientific facts of strength and body mechanics. It is scientifically proven, and a very rapid way of developing super strength, more quickly and completely than any other method known.

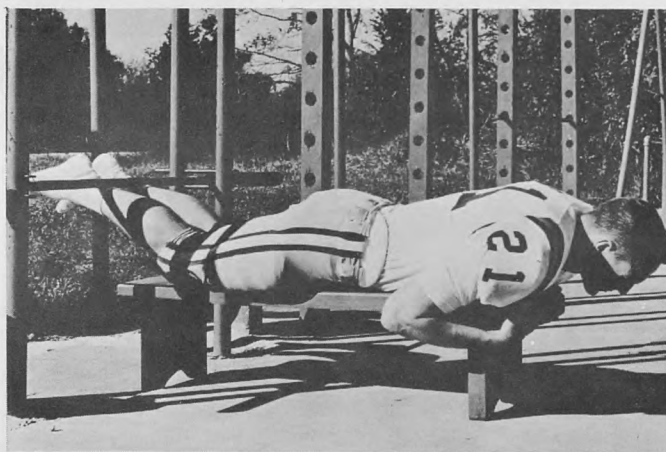
"FIC" will also develop maximum coordinated effort. It will train the muscles and nervous system to give a maximum coordinated effort in the position of the needed force. This is a new concept in training and will result in greater strength and in turn greater performance.

We know that the pure isotonic weight program (weight lifting) is time consuming, tiring and requires a considerable period of recuperation between the training sessions. The "FIC" system is founded on the proven principle that a muscle can grow only so fast regardless of how many exercises you practice or how much effort you deliver. To obtain the best results it is far better to subject the muscles to a single maximum contraction and all around strength will more quickly be attained. Strength will appear in the tendons, ligaments, muscles and even greater strength in the bones.

TECHNIQUES IN EXECUTING EXERCISES

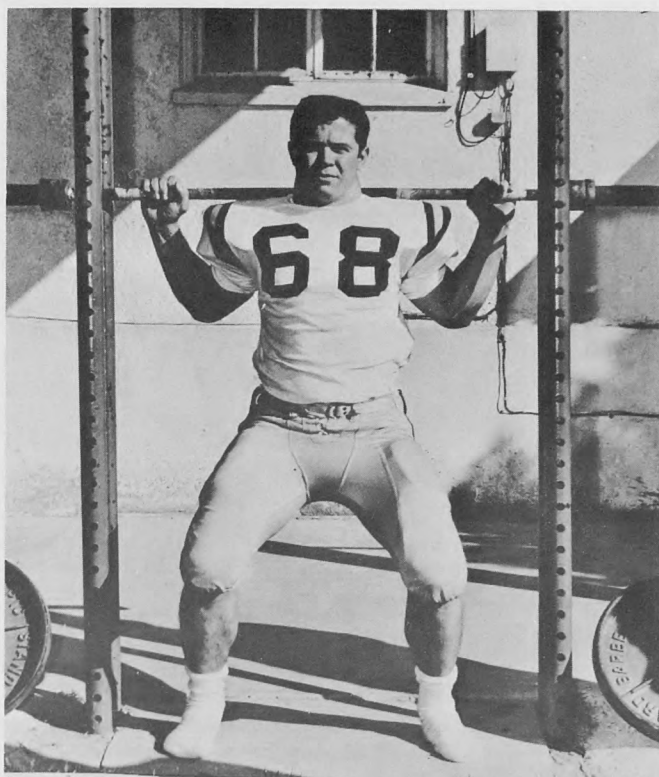
1. Always be properly warmed up.
2. Always assume good body position while exploding.
3. Do gradual program before giving maximum effort for 8 seconds. That is, you must be in good shape before doing the maximum effort.
 - (a) Work at least 3 times a week for 4 weeks at $\frac{3}{4}$ maximum contraction for 8 seconds. Assume good body position.
 - (b) Do gradual contraction for 2-3 seconds before maximum effort of 8 seconds. This should be for 2 weeks.
4. After you are in shape, work 3 times a week on your "FIC" exercises. On other days do running and agility drills.

Listed with pictures are a few isometric exercises we have put into our program. An excellent book recently published titled "Functional Isometric Contraction Exercises for Football" can be purchased by writing to Box 8476, L.S.U.

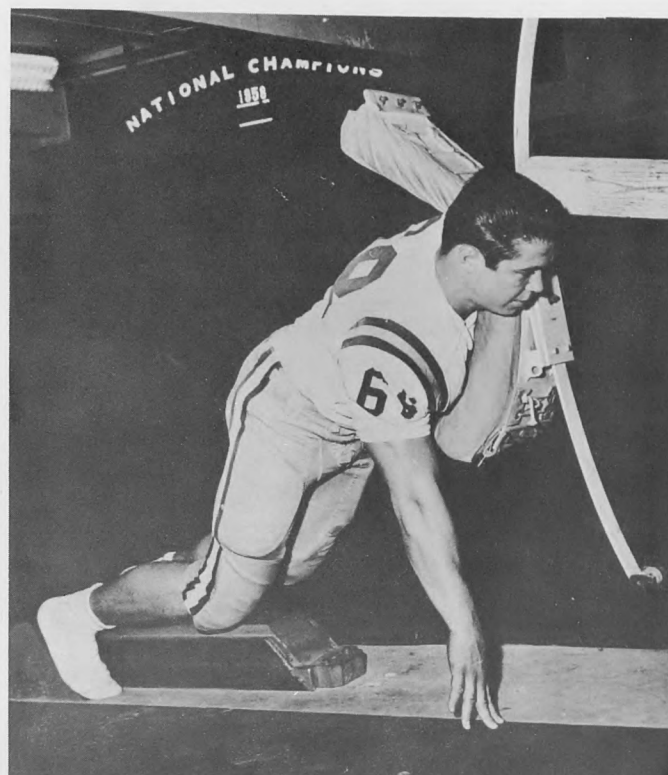


LEG CURL, LONG ANGLE—Assume same position as with short curl. You can also assume an angle between long and short which is the middle angle. The curl is a must for full hamstring development.

Continued on page 7



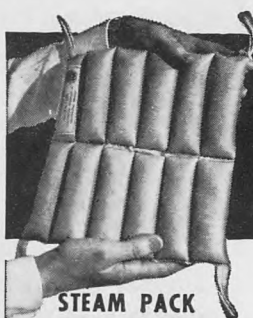
SQUAT—1/4 SQUAT—The heels should be about 8" in front of bar and on ground. Push up and backward slightly for 8 seconds. We have boy stand forward of bar instead of right under it in order to take the strain off of the lower back region. If shoulder pads are not worn you must have bar well padded.



LEG DRIVE—Over-sized starting blocks are used with stationary blocking unit. Athlete assumes good body position for blocking technique. He then pushes out for 8 seconds. Note that the starting blocks can be adjusted and may be used in 3 positions—short—medium—long stances.



Arm Pull — The bar is grasped at arm length with hands pronated. With heels on ground and feet spread about 8 inches apart the boy pulls up for 8 seconds. You can also rise on toes slightly and have knees slightly bent.



STEAM PACK

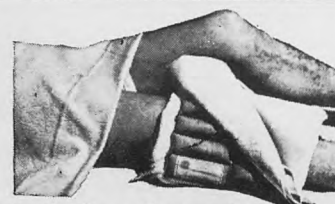
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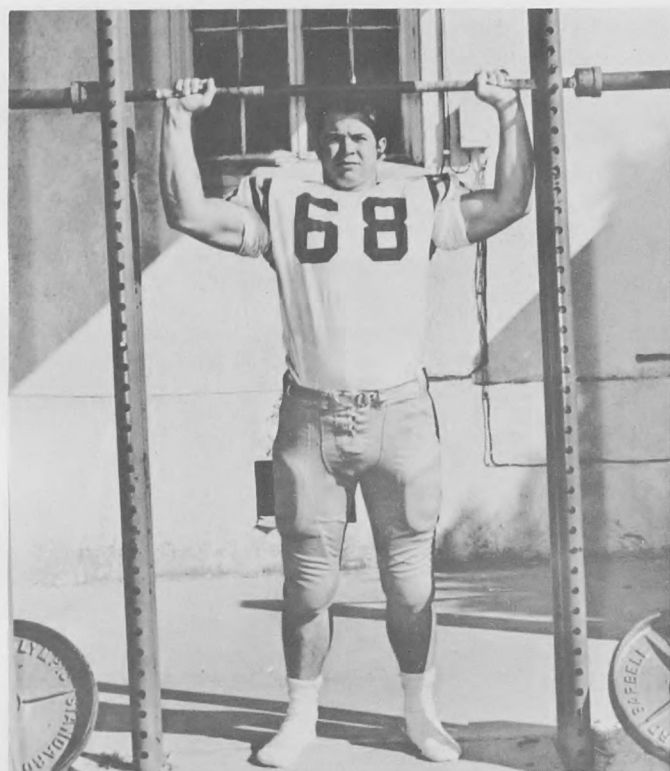


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HIGH PRESS—Set bar about 4" below the height of hands when the arms are fully extended or have triceps about parallel with ground. Stand directly under bar. Grasp bar about shoulder width apart. Look straight ahead, tighten legs, hips, and back muscles, and push up at maximum effort for 8 seconds.



SQUAT— $\frac{1}{2}$ **SQUAT**—With hamstrings parallel to ground and heels 8" forward from bar and about 14" apart. Bar well padded if not using shoulder pads. Athlete pressed upward and back slightly for 8 seconds.



LEG CURL, SHORT ANGLE—Lying prone on bench with the knees extending just over the end of bench. The bench is in front of bar and bar is placed just high enough to hook the heels under it. Apply pressure about 4" above heel and be sure bar is padded. With maximum effort curl up to buttocks for 8 seconds.

MANAGEMENT OF KNEE INJURIES

by O. D. MURPHY, M.D., Orthopedic Surgeon
Lexington, Kentucky
John W. Payne, Trainer
University of Kentucky, Lexington, Kentucky

DIAGNOSIS

Early careful exam—Note: Severity of injury; Degree of disability; Abnormal mobility; Location of tenderness; Amount and rapidity of swelling; Restriction of motion; Pain on normal motion; Pain on reproducing stress; Presence of locking; Presence of patellar click.

SEVERITY OF INJURY

MILD—Some fibers of ligament damaged; No loss of strength of ligament.

MODERATE—Definite tear in ligament; Loss of strength.

SEVERE—Complete tear of ligaments; Complete loss of integrity.

MILD KNEE SPRAIN

Positive Symptoms: Tender at site of tear; Pain on abnormal stress; Local swelling; Pain on forced motion.

Negative Symptoms: No instability; No blood in joint; No effusion; No locking; No pain on normal motion.

Treatment: Rest; Pressure wrap—felt pad; Cold—Heat; Injection (local hyaluronidase, procaine); Early active motion; No immobilization.

MODERATE KNEE SPRAIN

Positive Symptoms: Pain at site of injury; Local tenderness; Disability—only moderate; Swelling—may be severe; Fluid in joint usually; Pain on stress; Locking may or may not be present.

Negative Symptoms: No abnormal mobility.

Treatment: Rest; Cold, then heat with pressure bandage; Aspiration of joint; Protection—splint—cast—tape; Rehabilitation—very important.

SEVERE KNEE SPRAIN

Positive Symptoms: Immediate disability—severe; Knee "gives away"; Severe pain; Abnormal motion; Lateral—A-P—Rotary; Blood in joint; Blood infiltration; Marked swelling; Locking; Positive X-Ray on stress.

Continued on page 9

MANAGEMENT OF KNEE (Continued)

Treatment: Non-Surgical—Rest pressure dressing; Cold then heat; Aspiration; Protection—splint—cast—tape; Rehabilitation.

Surgical—Prompt decision; Early repair; Complete repair of all ligaments; Repair—not reconstruction.

KNEE REHABILITATION

Injury Occurs—Onfield Care; Sideline Procedure; After Game Treatment.

Program of Treatment—Pressure bandage—toes up—felt pad placed over injury—crutches (weight bearing without limping)—Quad setting—Ice bag—elevation.

Second Day—Resistive exercises—(loosened up); Re-examination by physician; Insist on full range of motion as soon as possible; Heel and toe walking; Whirlpool—95°–100° F.; Keep wrapped.

Third–Sixth Day—Resistive exercises with light weight—daily; Maintain full range of motion; Muscle setting in classes; Straight leg lifts; Stand with weight on injured leg; Gym shoes—jogging; Whirlpool—100°–105° F.; EMPHASIZE normal walking (walk slower).

Seventh Day through Fifteenth Day—*before and after practice*: five minutes—Whirlpool—105° F.; 30 minutes Quad exercises (approximately six sets); Wrap—gym shoes—jogging.

Fifteenth Day through season: Quad exercises— $\frac{1}{3}$ body weight minimum goal; Hamstring exercises $\frac{1}{2}$ amount of weight used for quads.

Expect atrophy: Measure weekly, as soon as circumference measurements are same, program goes to three days per week.

SURGICAL

Severe Knee Injuries: Obtain parents permission for surgery—complete explanation to parents and athlete.

Athlete is placed in hospital and begins straight leg raises (muscle education). It is very important that athlete is able to do raises before surgery. First day following surgery, straight leg raises begin again and continue several times daily until sutures are removed.

Average time in hospital is usually three to five days. Athlete is then discharged and placed on crutches, weight bearing begins when tolerable, within 6–10 days sutures are removed and resistive exercises replace passive exercises.

Resistive Exercise Program: Quad exercises—5–10 lbs.—6–8 sets (Set equals 10 repetitions); Hamstring exercises—5 lbs.—4–6 sets.

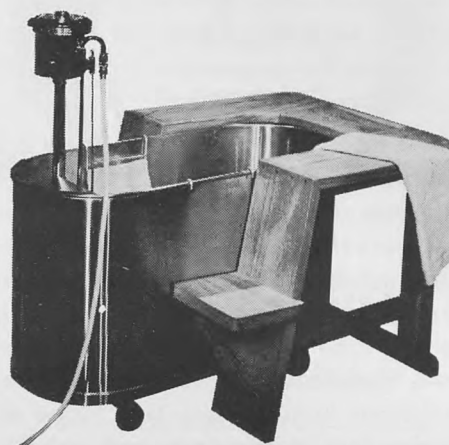
Along with these exercises, numerous other gimmicks are employed. Walking a straight line, placing one foot directly in front of other, attempting knee bends, swinging legs while sitting on side of table, lying on back attempt to touch knees to chest.

A progressive program is followed, pain and soreness are used as guides as to the amount of weight and number of repetitions.

References: O'Donahue, Don H., M.D., Orthopedic Surgeon, Oklahoma City, Oklahoma; Murphy, O. B., M.D., Orthopedic Surgeon, Lexington, Kentucky.

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Editorial

Hats off to Tow Diehm and Albuquerque for an outstanding job in conducting the annual National Athletic Trainers convention. The large turnout was treated to a very informative program and a fine social schedule. Mrs. Diehm should be commended for all the extra work she went to in order to make the trainers' wives stay in the great southwest more pleasant. Warren Ariail did his usual great job as exhibits manager. Thanks also to all the exhibitors who help make this convention possible.

I would like to make an appeal for any of you readers to submit an article about something you are doing in the training field for publication in the Journal. The best method to improve this publication is for you the reader to submit your thoughts.

As the 1962 football season draws closer it brings to mind the number of unfortunate fatalities that occurred in the 1961 season and the sensational publicity and public concern that was evidenced. There are many theories from people in many fields as to the cause of the increase in the number of football deaths. Some of these ideas and suggestions were good and indicated some intelligent thinking and investigation. However, there were many so called solutions brought forth that to me showed an almost complete lack of knowledge and understanding of the total aspect involved in the problems of a contact sport. We in the athletic training field have as our duties the prevention and care of athletic injuries. Most of our time is spent treating the injuries after they occur. I would like to see an effort by the trainers around the country to try to educate the uninformed what can be done to help prevent injuries to young athletes. This should include emphasis for the high schools to purchase the best protective equipment available especially in the helmet. To my knowledge there has never been a player injured just because he had an inexpensive jersey. The outside equipment does not have to be the finest and to my way of thinking, it is false economy to try to cut corners on the vital protective equipment.

I feel another neglected point is present conditioning methods that are employed by a great number of people. Emphasis should be placed on conditioning the entire body not just the legs. We are in an era where a great number of parents feel that the coaches are overworking their youngsters, and as a result of these pressures often times young athletes go into strenuous and demanding situations without the necessary strength and stamina to meet these demands without occurring injury.

Every effort should be made by the training profession to wipe out the misconception about the dangers of contact sports, and try to emphasize the preventive measures such as better equipment, and better conditioning and training methods.

The Editor

CARE OF THE FOOT

by PORKY MORGAN, Athletic Trainer
Kansas State College
Manhattan, Kansas

This is a very important topic, as we use our feet in almost all of our sports, except grandstand coaching. It is important that we get across to our athletes as early in their career as possible the proper hygiene for the feet. These are various guides to be used:

1. Wash frequently—not merely dunk in the water on the floor of the shower. Use soap and do a bonafide job of washing. Dry thoroughly. And at this time a little massaging with the towel and molding of the foot would be in order. Use foot powder either in foot bath or individual cans. Dry feet lessen the mess and waste of the powder.
2. Change often. Most of us change our sox daily or before each practice during "two-a-day." In conjunction with this, sox can be obtained that are sized and the sizes are identified. Proper fit of sox help prevent blisters, calluses and raw, sore spots. Nylon sox are not recommended, as they do not absorb any moisture. Two pair of a light and medium or two medium weight sox seem to work better. Shoes should be changed when possible, especially in basketball and not use a game shoe. Alternate them. In football use a shoe that will do the job. Not an extremely light shoe for practice, as they do not support the foot properly. Sore arches and lower legs will develop.
3. Trim right. Cut the nails straight across and not shorter than the flesh. Early in the game we should trim the nails for the athletes and instruct them. This could be done instead of some bull-sessions, or whenever the opportunity presents itself. If this is done early enough a lot of trouble is saved for the men taking care of our boys later on. Do not remove all of the nail until the new bed or plate has formed.
4. Fit right. Have the shoes and sox fit properly. Take the time to do it. We lose practice time that can be prevented, especially with injuries caused or aggravated by improperly fitting foot gear.
5. Exercise. Limber up the feet. Working them with the hands. Use of towels, marbles, heel and toe, and other exercises will help keep the muscles toned up and to do their work. Condition them by running properly before the practice season begins in all sports.
6. Keep dry. Dry them well and don't get them wet needlessly.
7. Walk properly. Toe straight ahead or slightly "pigeon toed."
8. Coaches and trainers should examine the feet. This can be done along with working on other parts.
9. Teach your people to check with you on their foot problems. Do not allow self treatment.

Some things we see and must care for:

BLISTERS—Use an antiseptic, whatever one your medical director recommends. Open at the base, unless it is already worn open, compress the fluid out. Fold the overlying skin back and use an antiseptic. We use tuf-skin,

Continued on page 11

CARE OF THE FOOT

(Continued)

allow to dry slightly and replace the skin. Bandage with whichever technique you prefer bridging over the tender spots.

We use tuf-skin and powder on the feet for the first couple of weeks and then gradually taper off. However, we recommend using powder after drying the feet always.

1. When "hot spots" occur during early season work a small amount of a bland ointment rubbed into the skin before the blister is formed seems to prevent them. And does not cause a loss of practice time.

Blisters or pinches on the borders of the heels. Hard dark roughened areas. These are due to improper fitting foot gear. Portions of the skin is pinched and minute blood vessels broken causing the darkness and they can be quite painful. We use a file, sandpaper or a wood rasp on them and cover with an ointment and in some cases bandage to reduce movement or bridge over to reduce the pain. Tape, moleskin or chiropodist felt are the materials most frequently used.

CORNS—Caused by improper foot gear or deformities. Here again we use sandpaper, file or wood rasp and remove the thickened layers of skin. Some times adhesive plaster impregnated with salicylic acid can be used to good advantage. Also collodion with salicylic acid can be used on the corns on the outside of the toes. For soft corns between the toes a felt pad can be made to fit which spreads the toes apart to keep the area dry and it relieves them.

When bunions exist and cannot be corrected there are latex devices that can be made to protect the area from pressure and your chiropodist can give you more detailed information on them.

PLANTAR WARTS—We use a necrotic type of foot ointment on the wart itself, protecting the surrounding skin by moleskin or chiropodist felt. Phenol, nitric acid and other media are frequently used, but personally we prefer that the physician use them.

STONE BRUISE—We use felt, rubber and/or a combination of both with 108° whirlpool and analgesic packs. On people subjected to this by their work, broad jumpers, high jumpers and to protect the toes a heel cup developed at Michigan is used. Dope on this can be obtained from Jim Hunt at the University of Michigan.

Pain in and around the arches can be padded to obtain some relief. Proper exercises can strengthen the supporting musculature and help to correct the trouble. There are many types of adhesive strapping and pads of felt, moleskin, sponge rubber and plastic that have been devised and used.

There are several companies that make various appliances to order and by making a tracing of the foot and marking the areas of the foot to be padded you can send this in and have them made. Some addresses for these are:

Kauffman Surgical Appliance Company
60 Bradford Pl.
Newark 2, New Jersey

Vosbury Foot Appliance Company
117 East 5th Street
Austin, Texas



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1961 REPORT OF HIGH SCHOOL FOOTBALL FATALITIES

by W. M. RUNYON

No. High School Participants.....720,000
 No. Fatal Injuries.....15
 Average Age.....16 Yrs. 8 Mos.
 Certified as Physically Fit.....15
 Approximate Exposures.....111,000,000 man hours
 Incidence:

2.08 per 100,000 participants

.0135 per 100,000 man hour exposures

Equipment: All reports indicate equipment was adequate and was not a contributing factor to any of the fatalities.

Type of Activity:

Game 9
 (1st Quarter 1; 2nd 4; 3rd 2; 4th 2)

Practice 6

Aid First Given by:

Physician 9

Coach or Trainer..... 5

No Injury Noticed..... 1

TYPE OF PLAY:	1961	1960	1959	1958
Tackling:	5—33.4%	1—14.3%	0—0	5—41.66%
Being tackled:	0—0	2—28.6%	2—25.0%	2—16.68%
Blocking:	0—0	1—14.3%	2—25.0%	1—8.33%
Being Blocked:	2—13.3%	0—0	0—0	0—0
Being Piled on:	1—6.6%	0—0	1—12.5%	1—8.33%
Heat Prostration:	2—13.3%	1—14.3%	2—25.4%	0—0
No Evidence of				
Contact:	5—33.4%	2—28.6%	0—0	0—0
Unknown:	0—0	0—0	0—0	3—25.00%
No Report:	0—0	0—0	1—12.5%	0—0

TYPE OF INJURY:	1961	1960	1959	1958
Brain Injury	9—60.2%	3—42.8%	2—25.0%	5—41.66%
Fractured Neck				
Vertebra	1—6.6%	0—0	0—0	3—25.00%
Ruptured Spleen	1—6.6%	0—0	1—12.5%	1—8.33%
Ruptured Liver	0—0	0—0	0—0	1—8.33%
Acute Congestion in				
Larynx—asphyxia	0—0	0—0	0—0	1—8.33%
Venus Sinus Rupture	0—0	0—0	1—12.5%	0—0
Heat Prostration	2—13.3%	1—14.3%	2—25.0%	0—0
Cardiac Arrhythmia				
caused by blow				
to chest	0—0	0—0	1—12.5%	0—0
Subdural Hemorrhage	0—0	2—28.6%	1—12.5%	0—0
Ruptured Aneurysm	0—0	1—14.3%	0—0	0—0
Heart	2—13.3%	0—0	0—0	0—0
Unknown	0—0	0—0	0—0	1—8.33%

FATALITIES:	1961	1960	1959	1958	1957	1956	Total
Direct	15	7	8	12	14	10	64
Indirect	7	1	3	0	1	4	16
	22	8	11	12	15	14	80

Year	No. of Fatalities	No. of Fatalities Per 100,000 Participants
1961	15	2.08
1960	7	0.97
1959	8	1.11
1958	12	1.66
1957	14	2.11
1956	12	1.66
1955	7	1.06
1954	12	1.85
1953	10	1.54
1952	5	0.77
1951	7	1.07
1950	10	1.54
1949	8	1.00
1948	9	1.33
1947	7	1.33
1946	14	2.11

Average number of fatalities per 100,000 for the past 16 years: 1.44.

COMMENTS: Reports on five of the fifteen cases state no unusual contact seen by those viewing the play. Three of the fifteen reports indicated that congenital weakness

was a major factor. One reported no specific injury. He reported extreme fatigue two hours after practice at home—pronounced heat prostration. Only one death resulted from fractured neck vertebra. Careful investigation indicated face guard was not a factor in this death. One report stated there was a previous suspected concussion three weeks prior to the fatality.

SUGGESTED PREVENTIVE METHODS: (1) For football competition opponents should be of similar size, experience, speed, strength and general athletic ability. (2) Increased emphasis by coaches on the proper fitting and wearing of protective equipment. (3) Reemphasizing thorough physical examinations and use of X-ray if in doubt. If congenital weakness is suspected check closely with medical authorities. (4) Check thoroughly with medical authorities on all suspected concussions. (5) Physician on field of play during game and practice if possible. If not possible, arrangements must be made in advance to secure physician's service immediately in case of an emergency call. (6) Officials must give increased attention to the strict enforcement of all aspects of the football code particularly those which will insure the safety and welfare of the participants. (7) Coaches awareness of fatigue factors with special attention during early season conditioning. (8) Competent supervision at both practice scrimmages and games. (9) Continued evaluation of safety factors by Rules Committee. (10) Continued close cooperation with manufacturers in their research of safety factors for athletic equipment. (11) Close cooperation with medical groups at national, state and community levels.

TIME OF YEAR FOOTBALL FATALITIES OCCURRED

Year	August	September	October	November	Total
1961	3	8	4	0	15
1960	1	4	2	0	7
1959	4	1	3	0	8
1958	2	5	4	1	12
1957	3	6	2	3	14
1956	1	3	4	2	10

This report is based on data supplied by each of the State High School Associations.

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1962 Convention

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Continued on page 13

N.A.T.A. REGISTRATION

(Continued)

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The Need For Protective Headgear In Athletics

Dr. Alan Ryan, Past Chairman of the A.M.A.'s Committee on Medical Aspects of Sports, presented these thoughts at the recent committee conference on Head Protection in Athletics.—May 19, 1962 - Chicago

Most of the discussion which you have heard this morning and will hear this afternoon has dealt with the forces and stresses involved in American football and the design and construction of an appropriate headgear for this sport. I will, therefore, not deal with this subject, but will confine my remarks to the need for protective headgear in other sports.

As the result of a long-standing interest in every type of athletics and sport, I have devoted considerable study to the characteristic actions in which all participants engage and the particular hazards which these actions pose for the athletes. In spite of the easily observable facts that hazards to the head are common to many sports, there has been very little interest until recent years, with a few notable exceptions, in providing head protection against these hazards. Early efforts in this direction were influenced more by the desire to protect against external bruises and lacerations of the scalp, eyebrows and ears than to protect the brain and its coverings. Design was influenced more by style, desirability of light weight, freedom of vision, and considerations other than those having to do with the effects of sudden acceleration and deceleration. It is only in the past decade that truly scientific research in headgear design and construction has begun.

While pondering these thoughts, I was led to a consideration of the historical development of the helmet as a means of defense in warfare. It seemed as if there should be some parallel developments in the evolution of the war helmet and the sports helmet and that perhaps since the ultimate design of the former embodied many centuries of practical experimentation, some useful lessons might be learned.

Archeological studies indicate the existence of war helmets as far back as the fourth millennium B.C. The first historical description of a helmet, however, is found in Homer's "Iliad." Diomedes and Ulysses are about to make a night reconnaissance of the Trojan camp. In the translation of Alexander Pope the arming of the heroes is described. First Diomedes, "... in a leathern helm he cased

Continued on page 14

The Need For Protective

(Continued)

his head, shorn of its crest, and with no plume o'erspread; no spoils enrich it and no studs adorn." Next, Ulysses, "A well-proved casque, with leather braces bound, (thy gift, Meriones) his temples crown'd; soft wool within; without, in order spread, a boar's white teeth grimaced horned o'er his head." A more literal translation of the original indicates that this was a leather helmet with a strong inner lining of interwoven straps under which a felt or woolen cap had been sewn in. So this was a type of suspension system within a leather helmet.

By the seventh century B.C. metal helmets were in use. They were made of bronze and usually roughly conical in shape, sometimes crested, and sometimes with ear or cheek flaps. Iron helmets appeared in Europe in the fifth and sixth centuries after Christ. They were at first made of overlapped plates but with the full flowering of knight-hood in the Middle Ages, the steel helmet and finally the one-piece forged steel helm made their appearance. Although some of the old bronze helmets had a nose guard attached, the original face-guard or visor, movable upwards or built into the helm, was introduced.

It was only with the introduction of this one-piece steel helm that the problem of head protection for the warrior who fought with sword, lance and axe was finally brought to perfection. It was necessary to cushion and support these helms in a variety of ways. Various hoods of fabric were employed, sometimes surmounted by a steel coif extending upward from the tunic or by a sort of doughnut made from rolling and coiling a short length of fabric.

One of the principal means of cushioning the head, however, was by the use of the hair which was worn long and gathered up into a cap under the helmet. Contrast this with today's crew-cut football player who has unconsciously surrendered, perhaps, a good part of his natural protection. Recollect the pictures of the teams of the turn of the century who did not wear helmets but wore their hair long and bushy.

With the advent of gunpowder into European warfare, the helmet gradually disappeared except as a ceremonial adornment. Then with the trench warfare of the first World War it reappeared. The second World War saw the introduction of the helmet liner, a cushioning device basically. The old flying helmet became today's crash helmet and, now in design and purpose the military headgear approaches closely the athletic type.

Almost every type of contact sport and the equestrian and racing sports, in which man's unaided speed is exceeded, require protective headgear. In hockey and lacrosse as well as football, the headgear should be basically designed to meet the stress provided by a high-mass, low-velocity impact. It must also be able to counter the effect of a high-velocity, low-mass impact provided by contact with the stick. The baseball helmet must sustain an impact which has a low-mass but high velocity. Racers, riders and skiers have to have protection against impacts of high mass and high velocity. The designs must additionally meet other requirements imposed by the nature of each sport. Let us consider them individually by the experience and hazards involved.

Ice hockey probably at the present time produces more injuries per man-hour involved than any of the team contact sports. Greater than natural speed is achieved by the gliding action of the skate on the ice. The ice itself provides an unyielding surface on which to fall, and falls are frequent because of the uncertain footing and hard contact. The playing surface is narrowly confined by a per-

imeter of "boards" which are relatively unyielding and at each end a high netting. The height of the boards is such that the player may readily be catapulted over them into the seats, spectators or floor of the rink. The sharp skates, hard puck, and heavy stick all provide hazards themselves. The rigid metal supports of the goal are an additional hazard.

Fatalities in hockey have resulted from brain injuries due to falls on the ice with and without skull fracture, being checked into or over the boards, head to head contact, the sharp point of the skate being driven into the head, and to blows from the stick and the puck. In a recent game in a Canadian professional league two players were sent to the hospital with serious head injuries, one from being checked into the boards and another from being hit with a stick. Three years ago a Massachusetts schoolboy died after striking his head on the ice after his helmet fell off.

Even had the helmet remained on his head, it is doubtful if it would protect completely against a brain injury. For many years those college and school players who wore any protection used an open-work cap of leather which served only to protect the scalp and ears against lacerations. The helmet now most popular is composed of two plastic shields which overlap over the temples, leaving the crown open and ears virtually free of protection. It deforms easily and is held in place by an arrangement of three straps which have considerable play. The professionals in the National Hockey League wear no head protection.

The face mask for the hockey goalie, first devised by Gene Long of Hamilton College in 1958 and popularized by Jacques Plante, provides much needed protection for the teeth and facial bones. It has still not been taken up by other professional goalies, although Don Simmons uses it in practice, and only a few colleges are using it. Mouth pieces are being used increasingly but should be mandatory.

Lacrosse has always been a rugged contact sport. The game is faster now than ever before but more emphasis is placed on technique and team play. Players used to wear the football team's helmets, often only their discarded ones. No one wore a face mask unless he also wore glasses. By the time a player finished college he usually had a complete upper dental plate, and sometimes a lower as well.

Today there is a lacrosse helmet, the most expensive model made principally of fiberglass. The crown is composed of multiple sections alternately arched and flat. A steel cage with detachable plastic foam pad in front of the mouth is fastened securely to the visor and ear flaps. There is a question as to how much protection it would afford the head in a fall directly to the ground or against a direct blow of a heavy defense stick.

The statistics compiled by Creighton Hale from the experience of Little League Baseball indicate that the major hazard to the head occurs from the thrown and the batted ball. Injuries can occur from the bat itself, particularly to the catcher, from player collisions on bases and in the outfield, and from running up against fences and other barriers in fielding the ball. Partially as the result of the beaming of Mickey Cochrane at the Yankee Stadium, a plastic headliner for the baseball cap was developed for major league use. Although this liner has probably helped to prevent some more serious injuries, it has not prevented Stan Lopata, Smokey Burgess, Ryne Duren, Billy Martin, Al Kaline, Harry Anderson and others from suf-

Continued on page 15

The Need For Protective (Continued)

fering severe concussions and cheek bone fractures in recent years.

A much more efficient protective headgear is the Little League helmet designed by Dr. Hale and developed with the manufacturer. This helmet which is lightweight, comfortable and inexpensive is at present required for wear at bat and on the bases for all Little League players. It should probably be used in all positions throughout the game and its use required for all amateur and professional baseball players.

For many years the only equestrians who wore a helmet were the polo players. The original helmet was simply a modification of the tropical sun helmet and did not provide much protection against anything but the sun. It was insecurely fastened and almost invariably was knocked off in a fall. Today's helmet is improved but could be improved still further to provide better protection against the flying willow ball, sticks, horses and falls.

Professional jockeys at the larger tracks now almost all wear the so-called "Caliente" helmet or some modification of it. At least two lives have been probably saved as the result of its use. Wearing of a proper crash helmet should be mandatory for all jockeys, both professional and amateur, and for all engaged in jumping competitions and cross-country riding.

In motor racing on land and in the water, the use of crash helmets is now almost universal. These helmets have been approved in design and efficiency by the efforts of the Snell Foundation and others interested in this field. Sterling Moss was not wearing one when he suffered a near-fatal brain injury in England recently. Their use should be mandatory under all amateur and professional racing associations.

Skiiers have had a crash helmet for downhill racing only within the past two years. The efficiency of this helmet has not been thoroughly tested as yet, but the necessity for its use, particularly in what is called "downhill" racing and jumping where the greatest speeds are attained, is clear.

Boxers have used a protective headgear in training and college and school boxers have used it in fights for a number of years. Its use will not reliably prevent damage to the brain and its coverings as demonstrated in the case of Charles Mohr two years ago. The mechanism of the "knockout" punch is such that it would seem impossible to prevent this phenomenon by any practical device. The headgear therefore serves the purpose chiefly of preventing lacerations to the scalp and hematomas over the ear cartilages.

Wrestlers use a strap and headband arrangement which is supposed to protect the ears. It is inefficient in this regard as presently designed and is easily dislodged from its correct position during the course of a bout.

Basketball seems to become a more rugged sport each year. Damage to the head from flying elbows and other heads in rebounding and from landing on the floor is becoming more frequent. Serious consideration should be given as to whether or not a head protector of some sort should be provided for basketball.

The face is a particularly vulnerable portion of the

head and has attracted more attention recently because of the mounting cost from an insurance standpoint of taking care of dental injuries particularly. For a long time the boxer's mouthpiece and the baseball catcher's mask were the only face protectors employed in athletics. Basketball and lacrosse players who wore glasses before the days of contact lenses wore a sort of cage to protect these, and there was a brief period of interest in nose guards for football players.

The introduction of the face bar and mask into football has so significantly reduced the number of facial and dental injuries that a number of experiments in other sports have been made. The face mask for hockey goalies was an independent development as has already been explained. The use of the mouthpiece is gradually being extended from boxing into football and other contact sports.

Protectors for the face and mouth are still in the experimental stage of development. Criticism should recognize this fact and more attention should be paid to constructive suggestions for improvements rather than to legislation to ban this type of protection entirely. Every major improvement in athletic protective equipment has been subjected to some type of criticism by players, officials, coaches, trainers or fans. Fortunately better judgment has prevailed and equipment has been steadily improved rather than being discarded.

This leads us to an important conclusion with regard to the provision of more and better protective headgear for sports. Where it can be demonstrated that such equipment is necessary to prevent injury and that the equipment is adequate for the protection it is expected to provide, the proper regulative bodies should make such usage mandatory for both amateur and professional athletes. Matters of safety in sports should not be decided on any basis other than the best interests of the athletes involved. Cost (within reason), prejudices, tradition, inertia and personal preferences should not be allowed to make a decision against safe practice.

Two years ago Jim Lemon, playing for the Cleveland baseball club, appeared in a game with an official Little League helmet. Although he enjoyed a good day at the plate, he was subjected to such unmerciful heckling by his fellow players as well as fans that neither he or any other major league baseball player has attempted to wear such a helmet again. Preventable head injuries continue to occur in professional baseball.

If major league hockey players would wear helmets, a better helmet than the present model would be developed and every amateur player would want to have one to wear. Although the players might offer some resistance at first, they would soon become ardent defenders of this equipment just as they would not do without their shoulder guards, hip and knee pads now. Kyle Rote said this winter during the controversy over the football face mask, "I don't think that any player in the National Football League today would want to step out in the field without one." Bobby Layne is the sole exception.

This Conference today then poses not only a challenge, to develop better protective headgear for sports, but an opportunity. The opportunity is to unite in making the strongest possible recommendations for the most widespread usage feasible of the protective equipment we already have available in these sports where we know that the hazard of head injury is great.

One Strip Of Tape

By Naseby Rhinehart, Trainer
University of Montana
Missula, Montana

I have been experimenting (2 years) with a strip of tape run around the heel and over the instep. It is surprising how much additional support (ankle) is derived from this single strip of tape. I am not advocating one piece of tape to support a weak ankle; but I am advocating additional support to any taped or wrapped ankle.

We apply this strip of tape over all of our taped and wrapped ankles. Sometimes, we apply this strip of tape before we hook the heel on our taped ankles. We use about $\frac{3}{4}$ pressure (almost as tight as we can apply the strip).

Try it!

ANATOMY OF THE ANKLE AND FOOT

The ankle joint is formed by the articulation of the lower ends of the tibia and fibula with the talus (astragalus) of the tarsus group of bones. This joint has the major classification of diarthrodial (freely moveable) and the subclassification of ginglymus (hinge). The only movements a hinge joint permits are flexion and extension. Some authorities refer to ankle flexion as dorsiflexion and ankle extension as plantar flexion.

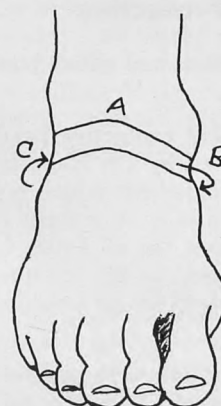
Because of the limited movements possible in the ankle it is necessary to turn to a consideration of other joints for inversion (supination or adduction) and eversion (pronation or abduction) movements of the foot. These movements occur to an excessive degree in many sprains of the ankle.

Inversion and eversion movements occur within the tarsus group of bones. It is to be noted that the articulation of the calcaneus with the cuboid and the talus with the navicular forms pretty much of a straight line laterally across the foot. This straight line arrangement is sometimes called the midtarsus joint and is the place where a great deal of inversion and eversion movements of the foot are concentrated. In addition to this arrangement the joint between the talus and calcaneus, the subtalar or subastragular joint, is responsible for some inversion and eversion movements. This can be noted by observing the movement of the calcaneus (heel) as you invert and evert the foot.

ANKLE WRAP (Louisiana)

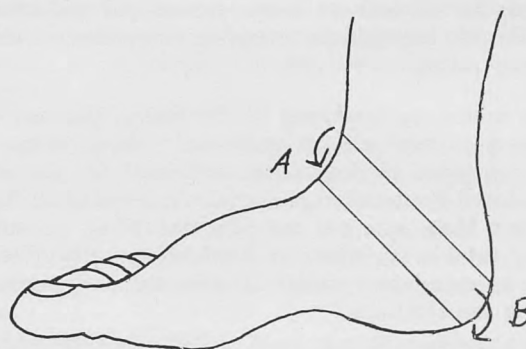
The objective of an ankle wrap is to limit excessive movements of the ankle and foot. Consideration must be given to protecting the ankle, midtarsus and subtalar joints. Protecting the midtarsus and subtalar joints from excessive movements will protect, to some degree, the ankle in that excessive movement in these joints tends to twist the talus laterally and spread the lower ends of the fibula and tibia. A spread of the tibia and fibula will tend to sprain the anterior inferior tibiofibular ligament, a ligament responsible for holding the tibia and fibula together, or, if the sprain is severe, a fracture of one of the malleoli may occur.

Taping that would not only stabilize the subtalar joint but also assist in stabilizing the midtarsus joint helps in reducing the incidence of ankle sprains. A strip of tape run around the heel and over the instep should be most helpful when used in conjunction with conventional taping, in reducing ankle sprains.



FRONT VIEW

1. Start on top of instep, at point "A".
2. Run tape to inside, in direction of arrow at "B".
3. Continue tape around heel to outside, in direction of arrow at "C".
4. End tape at starting point "A".
5. The direction of this strip of tape is for an outside sprain.
6. For an inside sprain, the direction would be opposite.



SIDE VIEW

1. Start on top of instep, at point "A".
2. Run tape to inside, in direction of arrow at point "B".
3. Around the heel, up the outside to starting point "A".
4. This is for an outside sprain.
5. Reverse the direction of the strip of tape for an inside sprain.

FROM THE EDITOR'S DESK

Ken Rawlinson, Head Trainer of the University of Oklahoma, in his new book, *Modern Athletic Training*, presents one of the better of the new books on athletic training. Ken has done a very commendable job in regard to presenting information that is useful and helpful to the Athletic Trainers and Coaches across the country. This book includes many facts of training that can only be presented by a man of Ken Rawlinson's great source of knowledge and experience. The text is easily understood by the neophyte and contains many lessons for the experienced trainer. This book can be recommended to anyone who is interested in the training of athletes. It's published by Prentice-Hall, Inc., Englewood Cliffs, New Jersey, and can be purchased by writing Prentice-Hall.

THE JOURNAL OF THE NATIONAL ATHLETIC TRAINERS ASSOCIATION

1962 INFORMATION SHEET

PUBLISHER FOUR TIMES YEARLY

CLOSING DATES: February 20th Issue—close on January 31, 1962; April 20th Issue—close on March 30, 1962; August 20th Issue—close on July 31, 1962; October 20th Issue—close on September 28, 1962.

RATES: All ads are non-commissionable. The NATA is a non-profit organization.

Yearly (4 issues) —	
Inside Covers	\$165.00
Full Page	140.00
Half Page	72.00
Quarter Page	45.00
Single Issues Only —	
Full Page	50.00
Half Page	30.00
Quarter Page	16.00

PAGE SIZES: Full Page—7½" wide by 9½"; Half Page—7½" wide by 4¾"; Quarter Page—3½" wide by 4¾". These sizes can be adjusted to fit needs.

CIRCULATION: All members, associate members, honorary members, and advisory members (M.D.'s). The magazine is also available to libraries, hospitals, medical offices, and physical educators on a subscription basis. Circulation in 1962 will be approximately 1200 to 1500 copies.

LAYOUT: Please send: Electros, mats, reproduction proofs, engravings or original art work. 2-color—\$5.00 per ad extra. Send directly to:

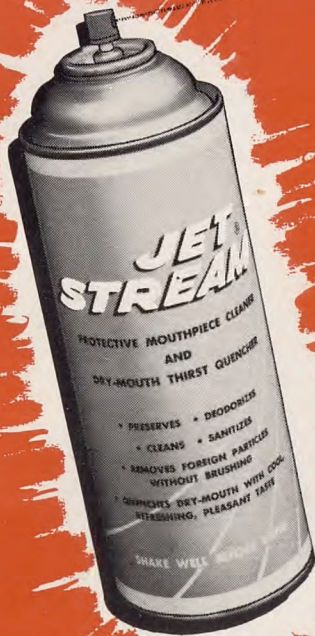
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