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Air New Zealand are keen supporters of Touch, the "fastest growing" Sport of the 90's.



## *Stretching Activities for Touch*



## AN OVERVIEW OF TOUCH NEW ZEALAND

Welcome to Touch New Zealand. Touch New Zealand is a non-profit incorporated society responsible for the promotion, administration and development of the sport of Touch. Founded in 1986, Touch New Zealand has 75,000 members in 20 provinces. Its aim is to ensure the long-term sustainability of the sport. This aim is achieved through:

- A comprehensive referee development programme from elementary to international level, supported by tutor and referee coach training.
- A comprehensive coach education programme from Junior to international level that compliments the Coaching New Zealand courses. This programme is also being supported by tutor training and development.
- Opportunities for competition above module level including a wide variety of regional and national inter-provincial tournaments and internationals including World Cups, Trans Tasman and South Pacific International Series.
- A comprehensive secondary schools competition structure launched in 1998/99, along with the Junior Touch development programme which includes Kiwi Touch as an official KiwiSport.
- Resource provision to modules including free scorecards and pocket-sized player rulecards.
- Management support and advice to provincial executives to assist in high quality module servicing, promotion, administration and delivery of Touch New Zealand technical and Junior development programmes and competitions.
- A marketing programme that includes media and TV promotion for the sport.

## INTRODUCTION

One of the most neglected aspects of conditioning for the touch player is the use of stretching exercises. Although players and coaches at the higher levels are becoming more aware of its value, there are still many instances where it is totally neglected from a programme. This booklet hopes to remedy this situation. It has been kept as simple as possible so that coaches, players and referees can benefit from it.

Paul Webb and Cary Thompson  
August 1986

## STRETCHING ACTIVITIES FOR TOUCH

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## 1. Flexibility: What It Means?

Flexibility is the ability of a joint to move through a range of motion. Cooper and Fair (1978) state that it is one of the five components of good performance. The others are strength, endurance, speed and co-ordination. (3:137)

Flexibility is specific to individual joints. Thus an individual can be flexible in the shoulders but not in the ankle area.

This booklet gives a number of stretching activities to increase flexibility for the game of Touch.

## 2. The Benefits of Stretching for Touch.

The benefits of stretching activities for touch players, if executed properly are:

- Help in the prevention of muscle injury.
- An important factor in improving all-round athletic performance.
- When combined with weight training, can improve running speed.
- Help in prevention and alleviation of muscle soreness.

One of the most neglected aspects of conditioning for the touch player is the use of stretching exercises. Although players and coaches at the higher levels are becoming more aware of its value, there are still many instances where it is totally neglected from a programme. Reasons for its neglect could stem from any of the following:

- Coaches lack of background and understanding of the value of stretching in conditioning programmes.
- Players lack of awareness of the value of stretching.
- The time factor. If there is not enough time to be able to do everything in the programme, stretching might be the first to go.

Generally speaking, touch players use techniques to gain greater speed, endurance and skills. But the use of stretching exercises to increase flexibility are often overlooked. It is essential that touch programmes at all levels use stretching activities as part of their programmes.

### 3. The Importance of Correct Technique.

If the exercises are not executed properly, not only will there be little or no benefit, there is a strong possibility of straining or pulling a muscle. The same applies if stretching activities are not conducted at all by players.

Limited flexibility results in restricted movement and greater possibility of injury to the muscles.

An important prerequisite to establishing a good flexibility programme is patience. Increased flexibility through stretching the muscles does not take place overnight. Too often the player becomes disappointed if immediate gains cannot be seen. It takes time to stretch a muscle. To attain the maximum benefits of stretching exercises for the playing season, players should begin stretching at least eight weeks before the season starts. During the season, the athlete should stretch daily, twice a day if possible. On the off season, a daily programme is recommended and four times a week should be the minimum. If a muscle is not continually stretched, it begins to shorten. If a player stretches only during the playing season, whatever benefits gained from the stretching will be lost between seasons due to the muscle shortening. It is for this reason that the touch player should use a stretching programme all year round.

When using stretching exercises as part of the conditioning programme, a period of 10 to 20 minutes for each session can be sufficient, but is a minimum amount needed to see gains in flexibility. It is most important to do stretching exercises just before the practice match, as this helps prevent injury. It is important that muscles be warmed up before they are stretched. By doing this, the muscles can be stretched further, thus increasing flexibility more rapidly and decreasing the possibility of injury. Stretching a muscle which has not been properly warmed and, therefore, has less give, is one of the most common factors causing injury during stretching. Thus, at the beginning of practice it is recommended that a few minutes of light jogging should precede the stretching exercises as this will raise the temperature of the muscles.

Ideally, stretching should be done both before and after practice for maximum benefit. It was stated earlier that before practice it acts as a protection against injury to muscles. After practice, it is an excellent way to relax tired muscles and prevent muscle soreness.

The correct execution of stretching exercises is essential to prevent injury. They should be done slowly with no jerking and bouncing. Static stretching takes place when the stretching position is assumed slowly and then held very still. When a muscle is stretched, it contracts against the stretching, thus creating more tension in the muscle. If the player bounces while stretching, the muscle will contract against

the jerk with a force equal to the jerk, thus developing a considerable amount of tension. When the muscle is stretched slowly, the force of the contraction against the stretch is only about one-half the force created by the bounce or jerk type of stretch. Thus, the static method is safer and more effective than the bouncing or jerking method.

The player should hold the stretching position for 30 to 60 seconds. A stretching position held for less than 30 seconds does not produce maximum results. Tension in the muscle builds as the muscle is stretched. When the player maintains that tension by holding the position for 30 to 60 seconds, a signal is sent to the muscle to relax all the tension, thus allowing the player to stretch the muscle further. The athlete should stretch until tension in the muscle is felt. Stretching should never be carried to the point of pain. Stretching to the point of pain can result in injury to the muscle.

To summarise, the following factors should be taken into account:

- a) Always warm up the muscles before stretching
- b) Assume the stretch position gently, no bouncing or jerking
- c) The stretch position should have a tight feeling, never pain
- d) Hold the position for 30 to 60 seconds
- e) Stretching before and after each session is recommended. If there is time for only one session, stretch before practice.

### 4. Muscle Groupings.

Touch is a game which uses primarily the lower body, i.e. the legs. The emphasis of stretching should be placed there but the upper body should not be neglected. Stretching activities should include the following areas: ankles, calf, hamstrings, quadriceps (thigh), groin, hip, back, shoulders, and neck. Before practice or a match there should be at least one stretching activity from each of the areas. With the emphasis in touch on the legs two stretching activities could be done on the quadriceps, hamstrings, calf and groin. Ideally, stretching should also take place afterwards but practically this is often not possible. Coaches should encourage their players to do stretching activities on their own. 10–20 minutes a day is the ideal situation or a minimum of four times a week.

## 5. Stretching Activities.

### The Ankle.



#### 1 Name: Ankle Rotator

*Technique:* Rotate your ankles in both directions a minimum of 10 times. Do both feet.



#### 2 Name: Ankle and Calf Stretch

*Technique:* The toes of one foot should be even with the knee of the other foot. The heel of the front foot will come off the ground as you gently rock forward on to your knee with your chest.



#### Name: Sit and Stand Ankle Rotator

3

*Technique:* Rotate your ankle in a circular fashion 5 x each direction with one leg and then the other while sitting. Then stand and balance on one leg and rotate the ankle. Change legs.

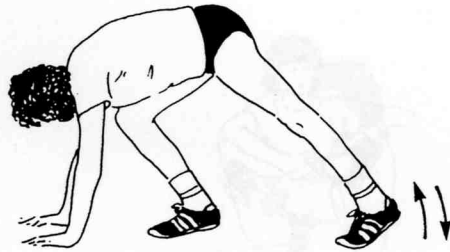
### Calf Muscles.



#### Name: Calf Stretch

4

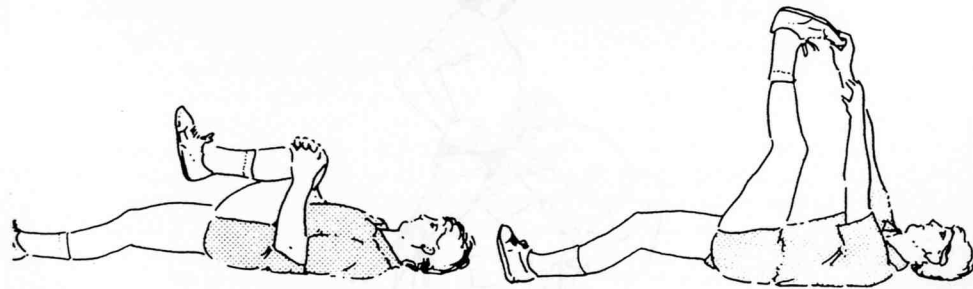
*Technique:* Lean forward with the front leg bent. Raise and lower the back leg so that the stretch can be felt in the calf muscle. Change legs. A minimum of three stretches for each leg.



**5** Name: "Get Set" Stretch

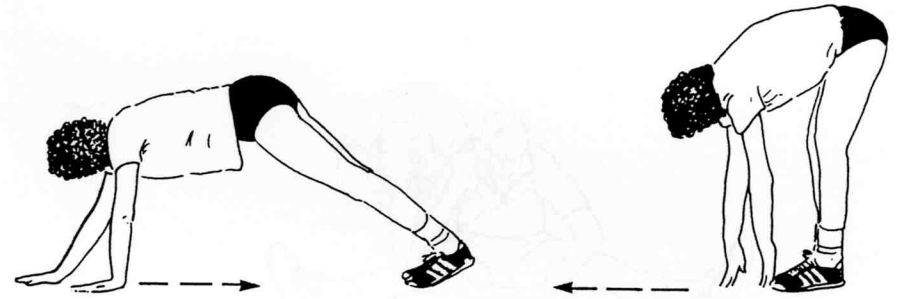
*Technique:* Place hands on the ground with front leg forward and bent. Raise and lower the back foot so that the stretch can be felt in the calf muscle. Change legs. A minimum of three stretches for each leg.

## Hamstrings and Hips.



**6** Name: One Leg Elevator

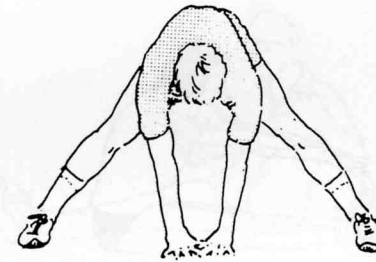
*Technique:* Lie on your back on the ground, with knees bent, soles of feet flat on the floor. Bring your knee to your chest and hold for 30 seconds. Then extend the leg and bring your toe back towards your chest. Hold for 30 seconds then return to the original position. Do the same for the other leg.



Name: Caterpillar Walk

7

*Technique:* Keep both legs straight. Gradually walk both hands away from the body. Hold and stretch for 10–30 seconds. Gradually walk hands back to original position. Stand up. Repeat three times.



Name: Splits

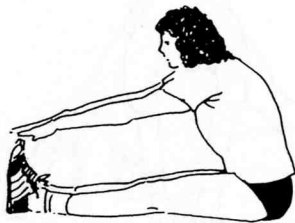
8

*Technique:* The splits position. Lean forward and touch the ground with your hands. This will stretch the inner hamstrings.



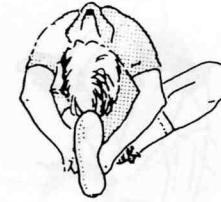
**9** Name: **Sitting Splits**

*Technique:* In the sitting position with legs wide apart (splits). Hold and gradually stretch.



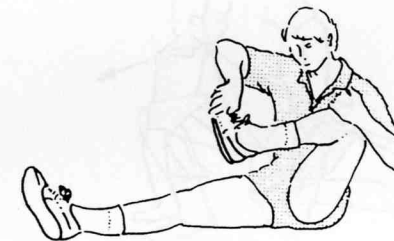
**10** Name: **Sit and Reach**

*Technique:* Sitting on the ground with legs straight out in front of you. Gradually lean forward with arms straight out moving towards your toes. Hold the stretch and then return to the upright position.



Name: **Hurdlers Stretch**

*Technique:* In a sitting position with right leg extended. Left leg is bent with left foot touching right knee. You can also have the left leg bent at a "hurdles" position. Bend forward and grasp right ankle with both hands. Feel and hold the stretch in the hamstrings. Change over and do the opposite leg. Repeat three times.



Name: **Sitting Hamstring Stretch**

*Technique:* Sitting position with one leg extended. Turn the other leg inwards and pull towards the body with the opposite hand and support the knee with the other hand.

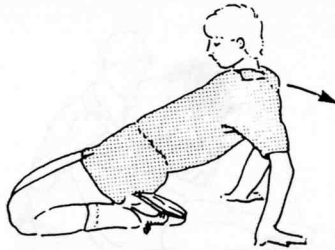


# Quadriceps (thigh muscles).



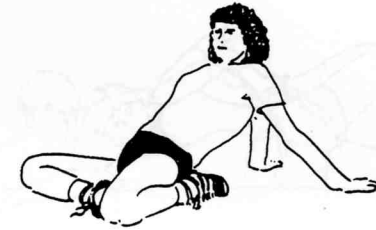
**13** Name: Standing Quadricep Stretch

*Technique:* Standing on right foot. Left hand extends left leg backwards. Hold for 30 seconds. Feel the stretch in the thigh. Change legs.



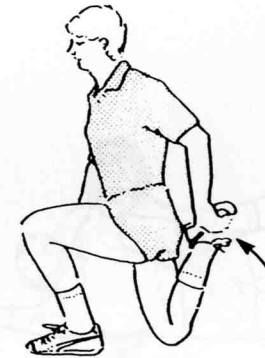
**14** Name: Kneeling Quadricep Stretch

*Technique:* Sitting with both legs underneath you. Lie backwards with the upper body and feel the stretch in the quadriceps. Hold for 30 seconds. Repeat 3–5 times.



Name: Sitting Quadricep Stretch

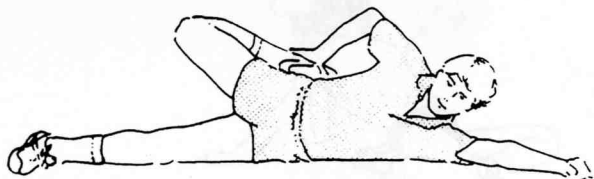
*Technique:* Sitting with one leg bent underneath you. Lie backwards as far as possible and feel the stretch in the thigh area.



Name: Squatting Quadricep Stretch

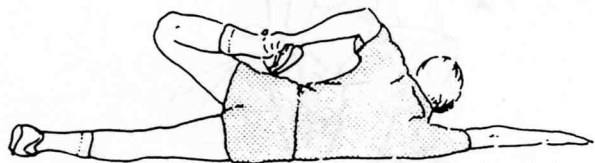
*Technique:* Place one knee on the ground. Pull back right leg with left hand. Feel and hold stretch on right thigh. Change legs.

## Quadriceps (thigh muscles)



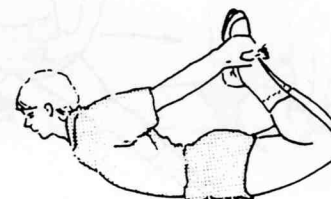
### 17 Name: Side Lying Quadricep Strength

*Technique:* Lie on your side. Gently pull back right foot with right hand. Hold the stretch. Repeat three times. Change over to the left side.



### 18 Name: Front Quadricep Stretch

*Technique:* Lie on your front. Grasp your left foot with your left hand. Gently pull your leg upwards. Hold the stretch. Repeat three times. Change over and do the same with the right leg.



### Name: Rocking Cradle

19

*Technique:* In a rocking position on your front. Grasp both ankles with both hands. Gently pull the legs back towards your shoulders and feel the stretch in your thighs. This is also a back stretch.

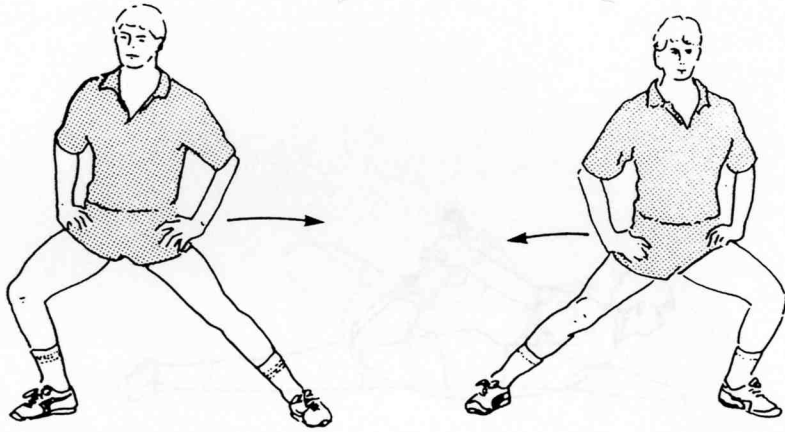
## Groin.



### Name: Sitting Groin Stretch

20

*Technique:* Player in upright sitting position. Push gently down with hands on knees and hold stretch.



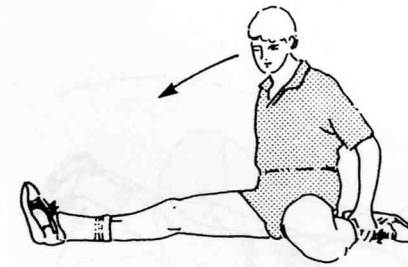
**21 Name: Standing Groin Stretch**

*Technique:* Player in standing position. Rock legs gently forwards and backwards to feel stretch in the groin area.



**22 Name: Sitting Foot Clasp Stretch**

*Technique:* Player in sitting position. Lean forward and clasp hands on feet. Push feet towards groin.

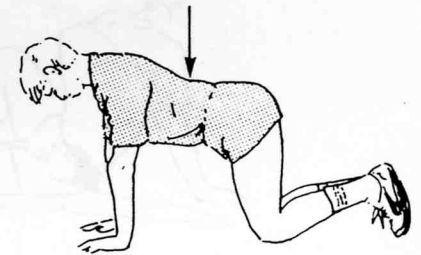
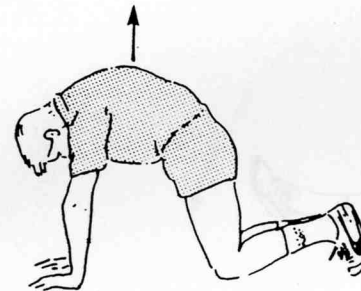


**Name: Hurdler's Groin Stretch**

**23**

*Technique:* Hurdler position. Sitting with one leg extended and the other at right angles like a hurdler in flight. Gradually lean forward and feel the stretch in groin and hamstring area.

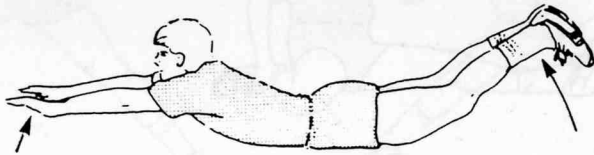
**Back and Side.**



**Name: Cat Arch**

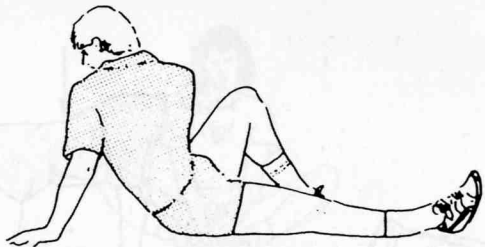
**24**

*Technique:* On all fours. Push down with your hips and stomach for the first position then cat arch your back. Hold the stretch.



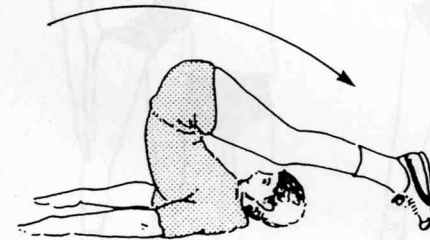
**25 Name: Prone Lying Lift**

*Technique:* Prone lying. Gently lift both your arms and legs. Hold the stretch. Release. Repeat three times.



**26 Name: Upper Body Rotator**

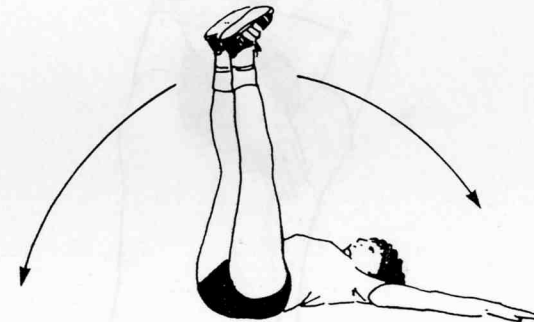
*Technique:* Place yourself in a sitting position with one leg extended and one leg bent. Turn your upper body to the side of the bent leg. Both hands should be placed on the floor with your head turned looking directly behind. Feel the stretch. Repeat three times then change over and do the other side. This is both a side and back stretch.



**Name: Leg Overs**

**27**

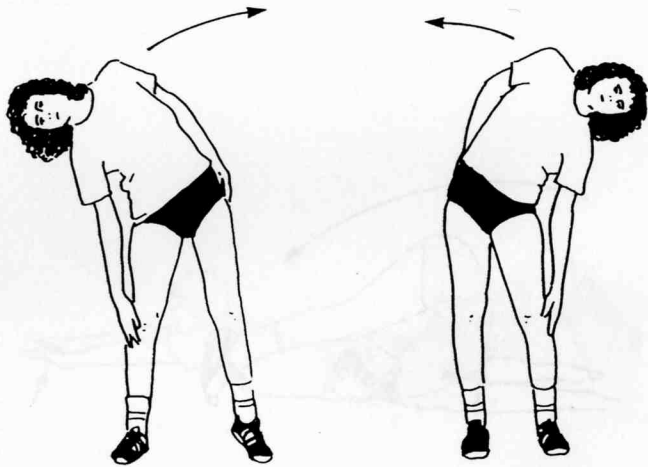
*Technique:* Place yourself in a backlying position with hands by your side. Lift your legs over your head until toes touch the ground behind. Hold and then return to original position.



**Name: Back Lying Side Stretch**

**28**

*Technique:* Back lying position with arms outstretched. Elevate your legs to a vertical position. Lower them slowly to the right side and hold. Bring them back to the vertical position. Lower them to the left side and hold.



**29** Name: Standing Side Stretch

*Technique:* Bend to one side and reach down the side of your leg with one hand and hold the stretch. Repeat three times and then do the other side.

## Arm and Shoulder.



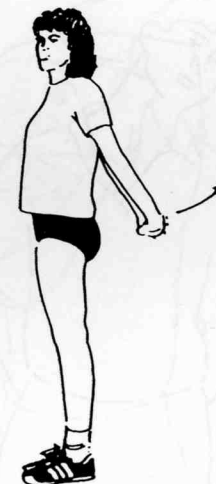
**30** Name: Bent Elbow Pull

*Technique:* The player lifts the arm and elbow above the head and then bends the arm and places the hand on the other shoulder blade. By holding the elbow with the other hand gently pull your elbow behind your head and feel the stretch. Hold for at least 10 seconds.



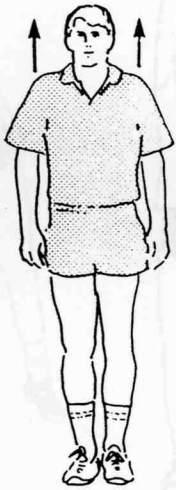
Name: Straight Arm Extension

*Technique:* With hands together gently extend your arms above your head and stretch. Hold the position for 30 seconds.



Name: Backward Arm Extension

*Technique:* Both arms behind you hanging downwards with hands clasped. Lift your arms backwards until you feel the stretch in the arms and shoulders. Hold and return.



**33** Name: Shoulder Shrugs

*Technique:* Shoulder shrugs. Gently move your shoulders up and down.

**Neck.**



**34** Name: Neck Rotator

*Technique:* Rotate your head around slowly in a full circle. Do this two or three times then rotate the head in the opposite direction.



Name: Backward Neck Stretch

**35**

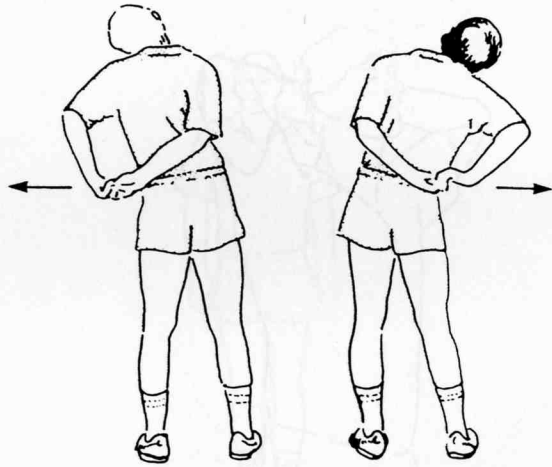
*Technique:* Gently push your head backwards against your hands and hold the position. Then push your head forwards with your hands and hold. The same movement can then be applied in a lateral direction.



Name: Head Rotator

**36**

*Technique:* Place left hand on the back of the head and right hand on the jaw. Rotate head and hold stretch.



### 37 Name: Neck and Shoulder Stretch

*Technique:* Move your head to the side towards your left shoulder as your left hand is pulling your right hand down across your back. Hold the stretch. Repeat three times and then do the other side.

## 6. Partner Stretches and P.N.F.

P.N.F. refers to 'Proprioceptive Neuromuscular Facilitation'. It is a method involving partner stretching which was developed by Herman Kabat and used in sport by Laurence Holt (1974). The method involves contracting a muscle group isometrically for a period of six seconds against an immovable partner. The following partner stretches can be used in touch. They provide variety to the program and can also increase the flexibility of players.

#### Correct Technique

- The partner should provide resistance for the contraction.
- Hold the contraction for six seconds.
- The resistance should be gradual.
- The person should never be forced into a new position.

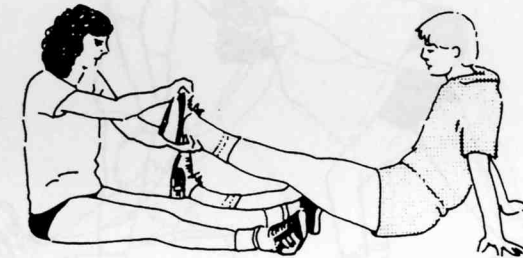
## Partner Ankle Stretches.



### Name: Partner Ankle Stretch

38

*Technique:* One person sitting on the ground with leg extended in the air. Partner holds foot with one hand and the other hand provides resistance as the player tries to move his foot forwards, backwards and sideways.

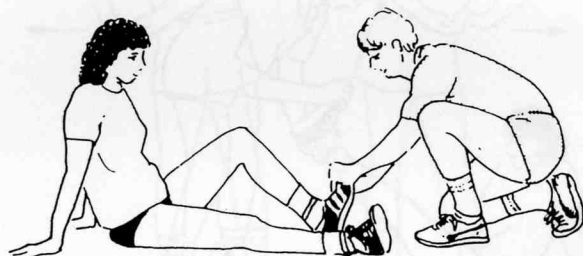


### Name: Partner Ankle Rotator

39

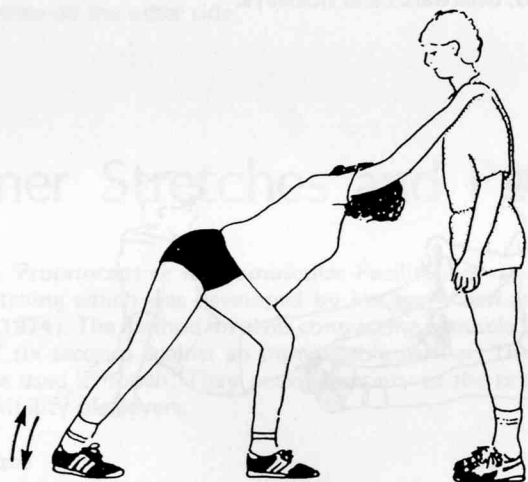
*Technique:* Player sitting on the ground. Partner provides resistance while player tries to rotate ankles. Do both feet and then change over.

## Partner Calf Stretches.



### 40 Name: Partner Sitting Calf Stretch

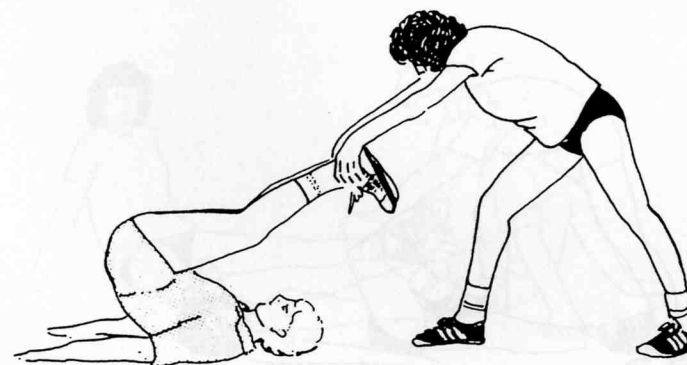
*Technique:* Partner pushes toe backwards. The stretch should be felt in the calf muscle. Hold the stretch. Change legs and then let the other partner do the stretches.



### 41 Name: Partner Standing Calf Stretch

*Technique:* Use partner as support, place your hands on partners shoulders. Front leg is forward and bent while back leg is straight. Lift and lower back foot to feel the stretch in the calf.

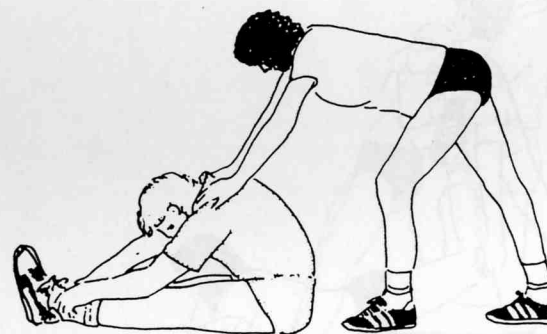
## Partner Hamstring Stretches.



### Name: Partner Pullovers

42

*Technique:* One player lies on his back with legs extended in the air. The other player stands and clasps the feet gradually stretching the leg backwards. This activity can also be done with one leg with the partner standing at the side.



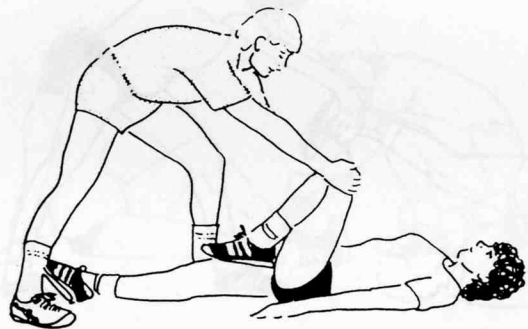
### Name: Partner Sit and Reach

43

*Technique:* Player sits on the ground with legs extended straight out in front. Partner pushes player gently on the back while player extends hands towards their toes.



## Partner Quadricep Stretches.



### 44 Name: Partner Back Lying Quadricep Stretch

*Technique:* Partner clasps both hands around the thigh. Player brings leg back towards the body against resistance provided by the partner.



### 45 Name: Partner Prone Lying Quadricep Stretch

*Technique:* Player A lies face down on the ground with one leg extended with bent knee in the air. Player B is standing above player A. This player clasps both hands above the knee and gradually stretches partner's leg back. Change legs.

## Partner Groin Stretches.



### Name: Partner Groin Stretch

46

*Technique:* Both players sitting on the ground with hands behind them. Player A rests their feet on the inside of Player B's feet. The player gradually pushes the feet outwards so the stretch can be felt in the groin.

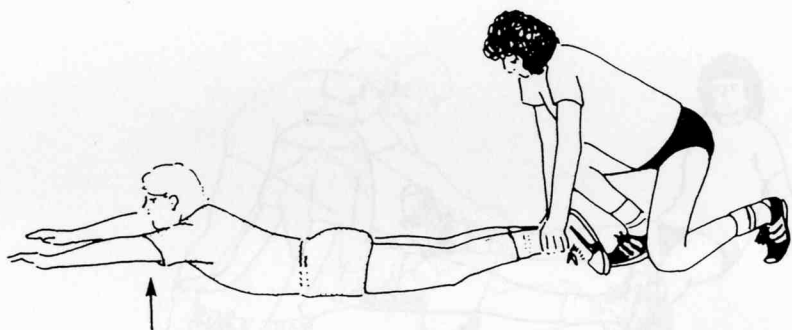
## Partner Back Stretches.



### Name: Partner Back Stretch

47

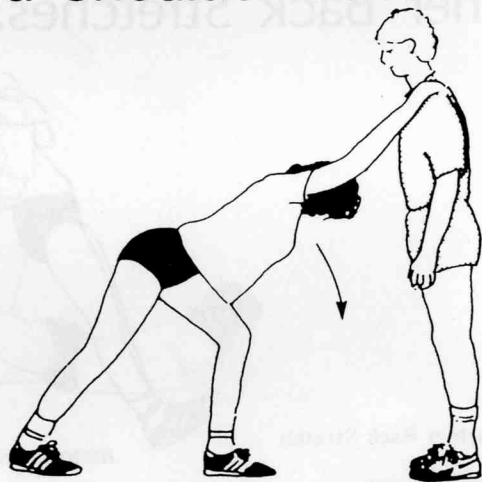
*Technique:* Two players standing behind each other. The back player wraps their arms under the front player's armpits and holds onto their hands. Slowly walk backwards. The front person balances on their heels. Care and correct support should be given.



**18** Name: Partner Prone Lying Lift

*Technique:* Player A is in a prone lying position. A lifts their hands and upper body off the ground. Hold the stretch and return to the original position.

## Partner Arm and Shoulder Stretches.



**49** Name: Partner Shoulder Stretch

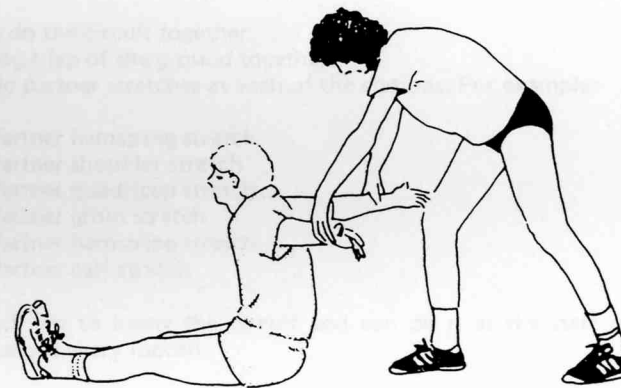
*Technique:* A places hands on B's shoulders while bending forward from the waist. Gradually press downwards with arms and shoulders and hold the stretch.



Name: Partner Arm Extension

50

*Technique:* A sits on ground with arms extended above the head. B gently pulls arms upwards the sky.

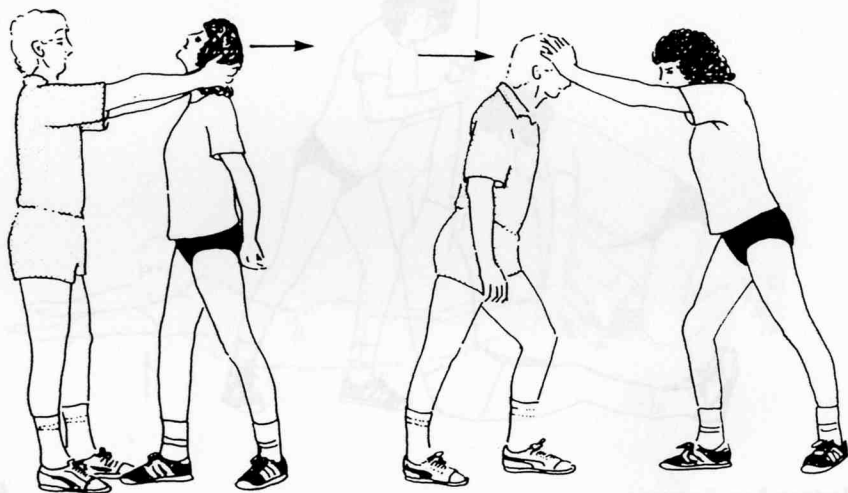


Name: Partner Backward Arm Extension

51

*Technique:* A in sitting position with arms extended backwards from shoulders. B gently stretches A's arms backwards.

## Partner Neck Stretches.

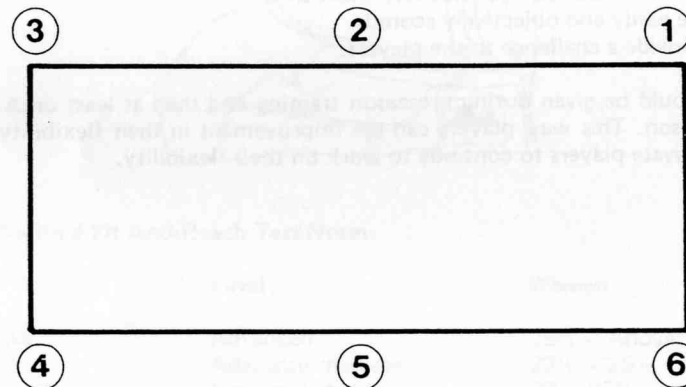


Name: Partner Neck Stretch

*Technique:* Gently push your head forwards against your partners hands which act as resistance. Hold. Then instruct your partner to clasp their hands behind your neck and gently push backwards against his hands.

## 7. Partner Circuit Stretching.

This method provides variety to the traditional method of stretching where everyone stands around in a group and does the stretches together. Use the touch field and set up various stations.



- Two players do the circuit together.
- They both jog a lap of the ground together.
- They then do partner stretches at each of the stations. For example:

Station 1: Partner hamstring stretch  
Station 2: Partner shoulder stretch  
Station 3: Partner quadricep stretch  
Station 4: Partner groin stretch  
Station 5: Partner hamstring stretch  
Station 6: Partner calf stretch

- Everyone will get to know the circuit and can do it at the start of practice. It can be changed every month.

## 8. Flexibility Tests.

Flexibility tests are invaluable to a coach as they measure an important component of the sport. The following tests have been chosen for these reasons:

- The test items do not require expensive equipment.
- They are easy to administer.
- They can be administered in a relatively short time.
- They can be easily and objectively scored.
- The tests provide a challenge to the players.

These tests should be given during preseason training and then at least once more during the season. This way players can see improvement in their flexibility thus helping to motivate players to continue to work on their flexibility.

### Sit and Reach Test.

This test has been developed to measure the range of movement in the back, hip and hamstring muscles. The object is to see how far you can extend your fingertips beyond your foot line with the legs in extension. Line up your heels with the 15 inch (38 cm) mark of a ruler. With your partner bracing your heels (which are 5 inches apart) and ensuring your knees remain straight, reach as far as possible with the finger tips between the toes. Record your best score in three trials. Describe them according to the norms table.

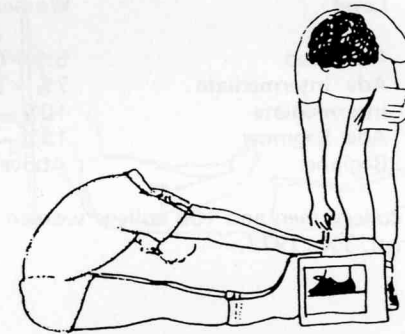


Table A: Modified Sit-And-Reach Test Norms

Men	Level	Women
23¼ – Above	Advanced	25¼ – Above
21¼ – 23½	Adv. Intermediate	22½ – 25½
18¾ – 21	Intermediate	20 – 22¼
17 – 18½	Adv. Beginner	18 – 19¾
Below 16¾	Beginner	Below 17¾

Based on the scores of 100 college men and 100 college women at Corpus Christi State University, Corpus Christi, TX., 1977.

### Shoulder and Wrist Elevation Test.

The purpose of this activity is to test the degree of shoulder and wrist flexibility. Assume the prone position – grasp the yard stick shoulder width apart and keeping your chin on the floor, raise the stick as high as possible. Measure the height raised and subtract this figure from the arm length (acromion process to the tip of the middle finger).

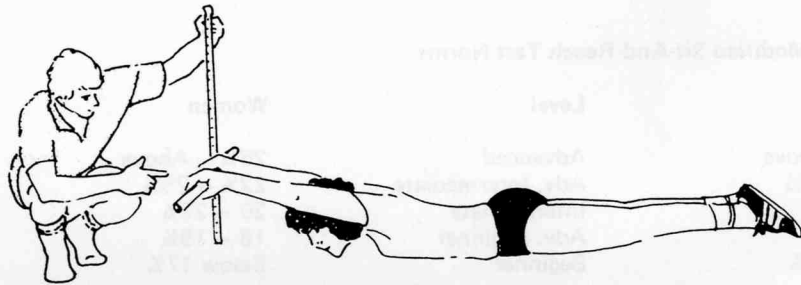
Score = Arm length – Best lift.

Record your best score from these trials.

**Table B: Shoulder-And-Wrist Elevation Test**

Men	Level	Women
6 – 0	Advanced	5½ – 0
8¼ – 6¼	Adv. Intermediate	7½ – 5¼
11½ – 8½	Intermediate	10¼ – 7¼
12½ – 11¾	Adv. Beginner	11¾ – 11
Above 12¾	Beginner	Above 12

Based on the scores of 100 college men and 100 college women at Corpus Christi State University, Corpus Christi, TX., 1977.



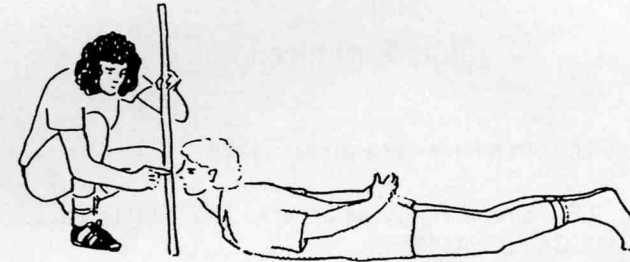
## Neck and Trunk Extension Test.

This activity measures the ability to extend the neck and trunk. Assume the prone position with hands resting on the small of your back, and raise your trunk and neck as high as possible. Measure the height reached at the tip of the nose. A second person may be required to hold the subject down at the base of the buttocks.

Subtract the height reached by the tip of the nose from the trunk and back length. This is the distance between the tip of your nose and the seat of the chair on which you are sitting.

Score = Trunk and Neck Length – Extension Height

Record your best score from these trials.



**Table C: Trunk-And-Neck Extension Test**

Men	Level	Women
3 – 0	Advanced	2 – 0
6 – 3¼	Adv. Intermediate	5¼ – 2¼
8 – 6¼	Intermediate	7¼ – 6
10 – 8¼	Adv. Beginner	9¼ – 8
Above 10¼	Beginner	Above 10

Based on the scores of 100 college men and 100 college women at Corpus Christi State University, Corpus Christi, TX., 1977.

The results from the three tests can be recorded on the following table.

**Table D: Results Sheet**

Test	Score	Norms Comparison
Sit and Reach		
Shoulder and Wrist		
Trunk and Neck		