

Referee fitness from Resolution Bodyworks by Mieka Davis atc, cmt

See online stretch for success packet and Aerobic flexibility worksheet for pictures of stretches.

Try Dynamic stretching and holding static for 4 deep breaths to the end range of motion is recommended prior to exercise.

Post exercise or during half time, try a static stretch of 4-12 deep breaths to relax the muscles but maintain a target heart rate for exercise. Breathing in through the nose, and out through the mouth allows for relaxation.

Always work within your Target heart zone. Listen to your body signals of sweating, dizziness and use the 'talk test' (can you talk while you are running,) if you can't talk then slow down for optimal endurance success.

Keep your 'diet' in check. Your eating program is the fuel that can make or break your race down the sidelines. Use on-line or supportive programs like weight watchers or www.choosemyplate.gov to see how equal your caloric intake and exercise output. Losing weight is math, emotional discipline is success. www.oa.org

Reach out for help.

Need to stay positive? (power thoughts 609-660-8156) keep coping mechanisms safe and healthy, walking, Yoga, meditation/prayer 9 minutes a day will change your life.

AA/Al-anon, church or other religious disciplines are free and easy to access online or at your local community center. Hospitals will have listings and referral services also. www.Al-anon.org, www.alcoholicsanonymous.org

Electrically imbalanced? Chronic pain or feeling stuck, can't sleep? Get an energy bodywork session like Acupuncture or Polarity. Your body is chemical and electrical and needs a tune up at least once a season.

Call the NE School of acupuncture www.nesa.edu or www.Spatech.edu

find a practitioner near you or try a discounted session at the schools.

Look for Holistic Massage therapists that combine bodywork with massage therapy. Massage is not all equal, try Swedish before deep tissue, or an integrated session before rolfing types.

www.resolutionbodyworks.massagetherapy.com

Low impact exercises and Williams Series for the back

1. Single knee to chest, hold 30 seconds, switch
2. Two knees to chest, hold 30 seconds, then rock side to side for 1-2 minutes.
3. Straight leg stretch, hip level one hand behind knee and behind calf, 30 seconds each leg.
4. Cat stretch, on hands and knees round back up and then let level flat. Repeat.
5. Tri-up stretch: hands in triangle position under chin, push up to straighten elbows, keeping hips flat against floor/bench.

Crunches with feet in the air 3x25

Push -up with one foot on the ground three attempts for 10 minim.

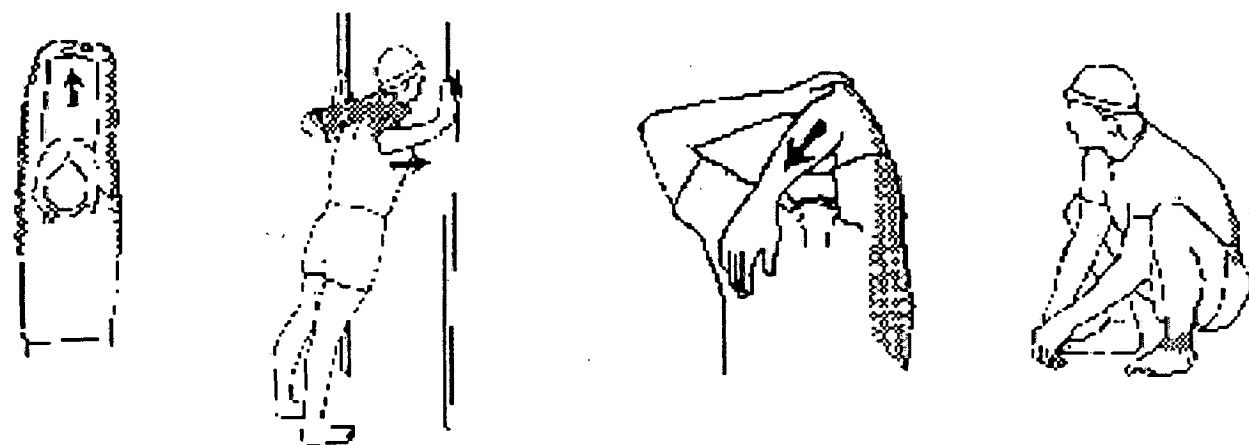
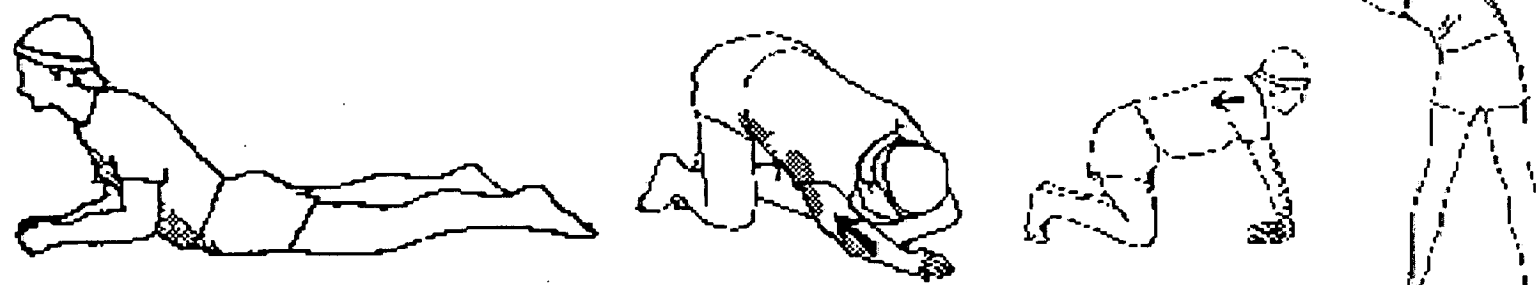
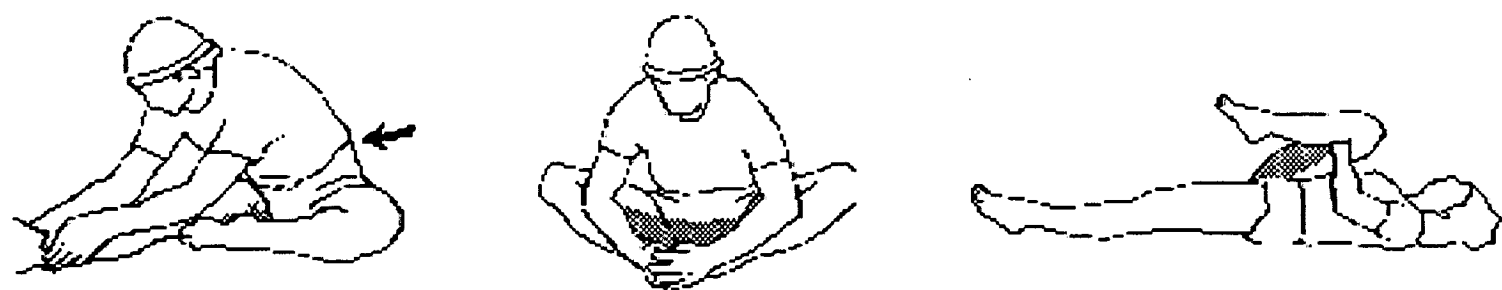
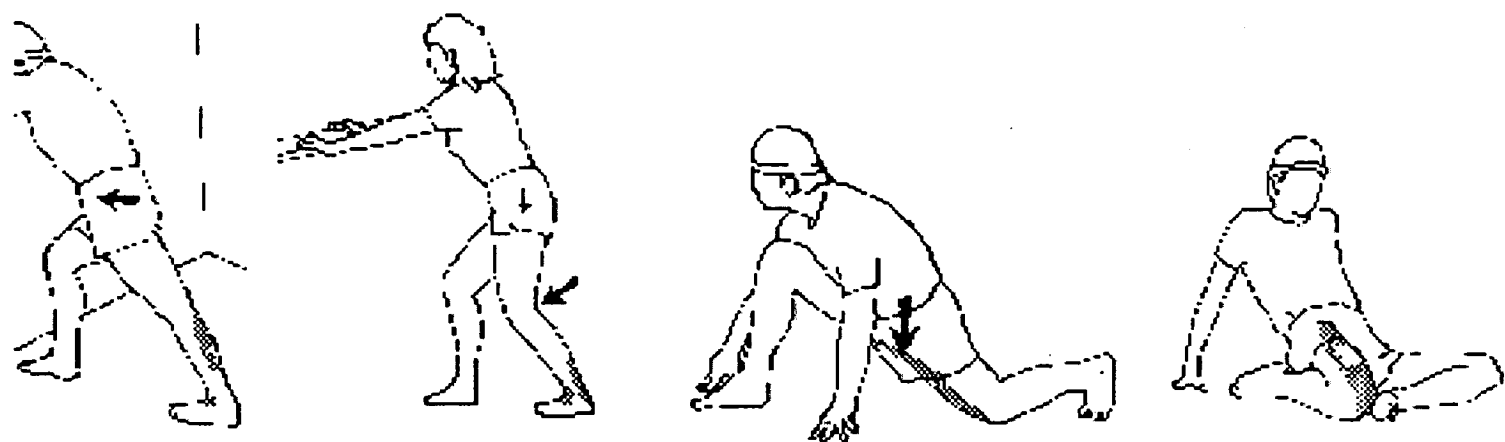
Windshield wiper abdominals three attempts for 30 seconds each.

Thread the needle: cat stretch position/ reach one hand under the other and then up to the sky 3x20

Toe taps 3x25 three positions

One leg squats (pizza cut a large slices for 8) do both legs

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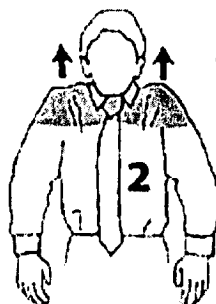
TRAVELER'S STRETCHES

APPROXIMATELY 2 MINUTES

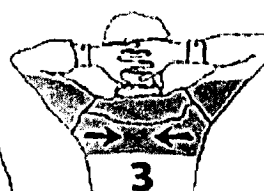
Stretch at various times throughout your journey to help your body feel less stiff and tight.



1
3-5 seconds
each side
(page 92)



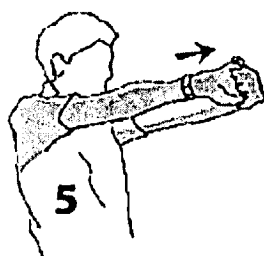
2
3-5 seconds
3 times
(page 46)



3
3-5 seconds
(page 94)



4
5 seconds
each side
(page 44)



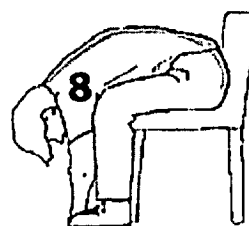
5
15 seconds
(page 90)



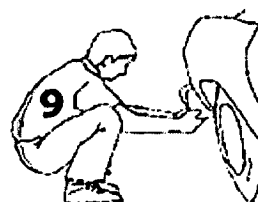
6
8-10 seconds
(page 90)



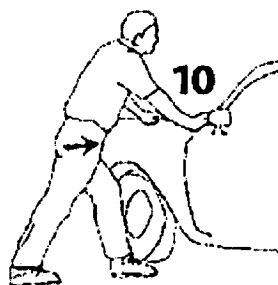
7
8-10 seconds
each side
(page 60)



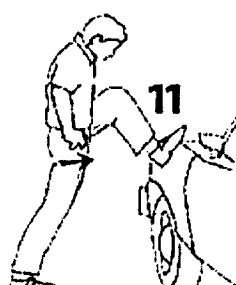
8
5 seconds
(page 92)



9
10 seconds
(page 66)



10
10 seconds
each leg
(page 70)



11
8 seconds
each leg
(page 74)



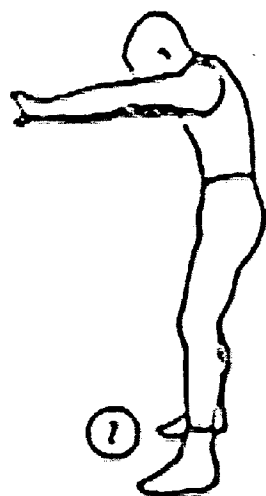
12
10 seconds
each leg
(page 73)

126 Routines

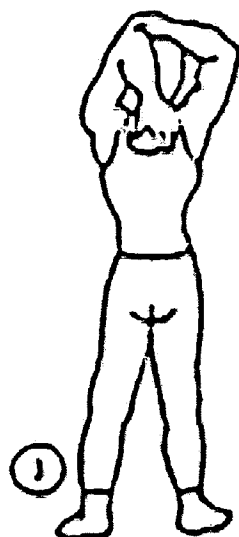
Stretching © 2010 by Bob and Jean Anderson, Shelter Publications, Inc.



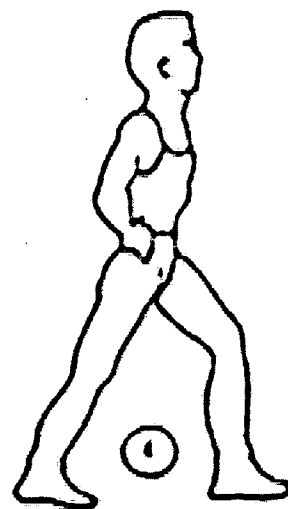
CHEST



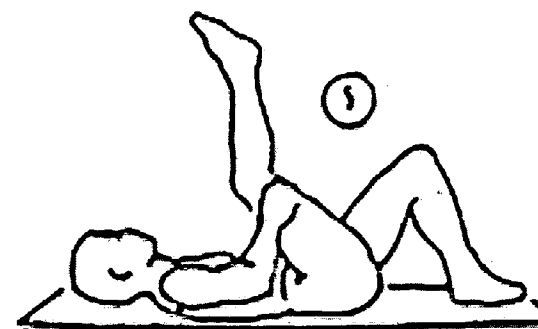
UPPER BACK



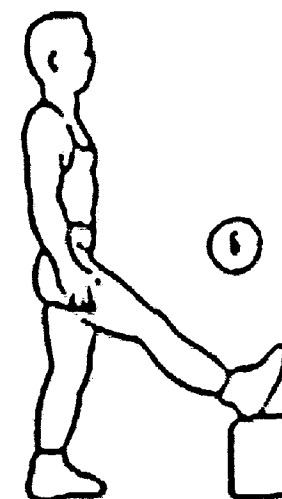
BACK OF UPPER ARMS



CALF



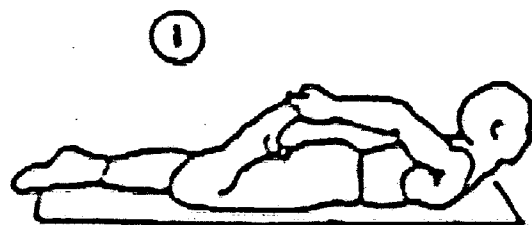
BACK OF THIGHS



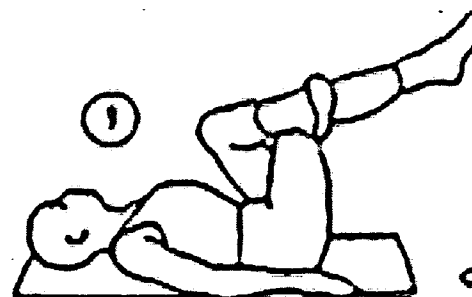
BACK OF THIGH



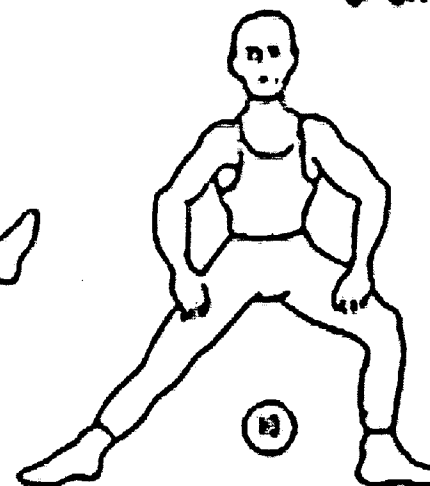
FRONT OF THIGHS



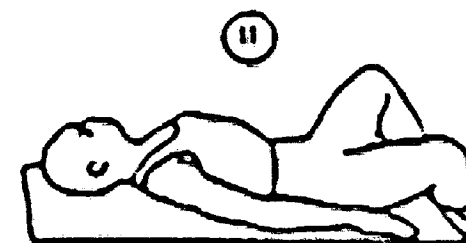
FRONT OF THIGHS



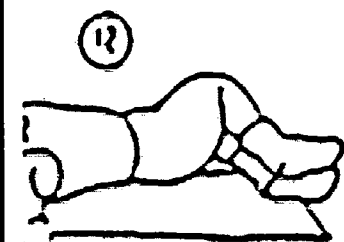
OUTER THIGHS



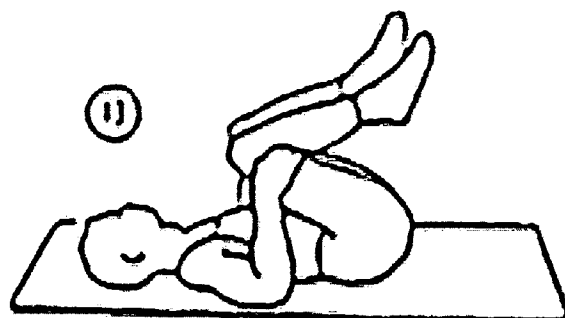
KNEE THIGHS



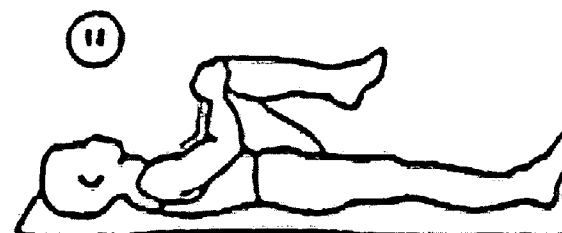
INNER THIGHS



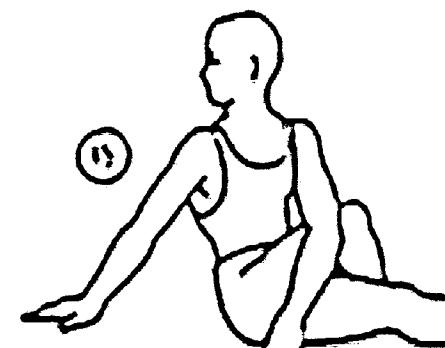
LOWER BACK



LOWER BACK



LOWER BACK



IGASO

The following is a brief description of each equation presented on this page:

Age Adjusted = $(220 - \text{Age}) * \% \text{ of Max}$

You'll notice that this equation is very simple and can be easily memorized. Unfortunately, it can also have large prediction errors, oftentimes greater than 10 bpm.

Karvonen = $((220 - \text{Age} - \text{Avg. Morning Resting Heart Rate}) * \% \text{ of Max}) + \text{Avg. Morning Resting Heart Rate}$

The heart rate calculated in the Karvonen method is a more personalized figure closely tied to your fitness level. It follows that your resting heart rate is unique to your body and essential to determining your maximum heart rate. Find your average morning resting heart rate by measuring your pulse in the morning before you get out of bed. Do this for several mornings in a row and determine your average. Every few weeks or so, reacquire your average resting heart rate as it will change with your training efforts. (The Karvonen method is named after Dr. M. J. Karvonen who did research in the concept of heart rate reserve and published the results in 1957.)

Heart rate monitoring is essential for maximizing the effectiveness of your training. Your heart rate gives you a gauge to quantify how much effort your body is putting into a workout. Too many factors can interfere with your mind's ability to subjectively measure exercise intensity.

The easiest way to begin heart rate training is to purchase a heart rate monitor (HRM) from your local or online sporting goods retailer. Read the instructions and strap the monitor on before your next workout. The more you use the HRM the more you will develop a sense of how your heart beats throughout various stages of your workout.

You should know your maximum heart rate to establish boundaries during training. Most recommendations suggest targeting a heart rate between 55% and 85% of your maximum heart rate for a period of time, say 30 minutes, to build your aerobic base.

50% - 60% = Beginner or Recovery Zone.

Maintaining a heart rate in this zone is ideal for comfortable exercise to improve overall health. Start here if you are new to exercise or are in need of a recovery day between intense workouts. It is also a good zone for overweight people to begin burning fat. The effort level is low and allows time for the muscles and joints to wake up and prepare for a more active life.

60%-70% = Heart Health and Weight Loss Zone.

If you get "winded" walking up a single flight of stairs, start training in this zone. With your heart beating between 60% and 70% of your max you are conditioning it to pump more blood. Better circulation efficiency is the key to delivering more oxygen to your muscles. Stored body fat is the primary fuel in this zone. Your long, slow, distance workouts are in this level - with emphasis on slow.

70%-80% = Aerobic Zone.

If you can't run the soccer field like you used to, it is probably because you are not spending enough time in this zone. Training in the aerobic zone will improve cardiovascular fitness. Your body will more effectively transport oxygen-rich blood to your muscles. Your 30-mile road ride will begin to take less time. Your 10k's will improve, etc.

80%-90% = Anaerobic Threshold Zone.

When your heart is beating in this range, your body is producing lactic acid at levels it cannot effectively remove. Sprint workouts are designed to push your anaerobic threshold. Training in this zone conditions your body to tolerate lactic acid for longer periods of time. This will lead to muscle growth and significant improvements in athletic performance.

90%-100% = VO2 Max Zone

VO2 Max is your body's maximum oxygen consumption level. It is measured in volume/time units. You may reach this zone only for very short bursts of time. When you go into oxygen debt by racing your buddy to the finish line you have reached your VO2 max. Your lungs can't keep up your body's demand for oxygen and lactic acid floods into your muscles. Training in this zone increases enzymes in your muscles responsible for anaerobic metabolism.