



# Navy Recruiting Command

## Fitness and Nutrition Guide

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AMERICA'S  
**NAVY**

A GLOBAL FORCE FOR GOOD™



(Rev 1/17/13)



# WELCOME ABOARD

During the next few weeks or months, you will begin your initial training as a proud member of the United States Navy. Whether you are attending Officer Candidate School (OCS), Officer Development School (ODS), or Recruit Training Command (RTC), you will be expected to meet rigorous physical demands. This guide will assist you in completing the physical fitness portion of OCS/ODS, or RTC and prepare you for success in the United States Navy. This guide is not designed to be a comprehensive physical training program that meets the needs of every individual. Rather it provides a basic template for you to use in preparation for the physical demands that you will be expected to meet at OCS/ODS or RTC and maintain a lifestyle conducive to long term health.

Future Sailors in the Delayed Entry Program (DEP) and OCS/ODS candidates will have the opportunity to participate in organized physical fitness sessions. For Future Sailors, these sessions are held at DEP meetings and led by Recruiting personnel. Your Recruiter will provide you with a schedule and times of these meetings during your 72-hour indoctrination. Although strictly voluntary, you are strongly encouraged to participate in these sessions. These organized physical fitness sessions are designed to introduce you to a culture of fitness that is vital to the mission readiness of the United States Navy.

If you experience any pain or feel like your personal safety is ever at risk while participating in organized Physical Training, STOP and notify Recruiting personnel immediately. This program is designed to help you increase your level of physical fitness - not to cause injury or jeopardize your safety.

You may also be afforded the opportunity to take the Initial Fitness Assessment (IFA) prior to reporting for duty at RTC or OCS/ODS. This is strictly a voluntary option, but it is a very good measure of your fitness level and will inform you of the standard you must meet in order to successfully complete initial training. This test will be administered in full accordance with all safety requirements outlined in OPNAVINST 6110.1 series. The results of your IFA must be documented and retained by your recruiter.

**You will not be authorized to participate in any station level Physical Training unless you are within pre-accession body fat standards. To participate in the IFA, you must meet Navy Height/Weight or Body Composition Assessment standards (% body fat). Additionally, you must have a signed Hold Harmless Agreement in your DEP Training Folder or your Officer Residual File.**

**Body Composition Assessment standards (% body fat) and PRT requirements must be met in order to be advanced to E-2 and beyond.**

**I have read and I understand the requirements listed above:** (Signature required below)

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**Future Sailor**

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**Recruiter**



# FOR YOUR SAFETY

Before your organized physical training or Initial Fitness Assessment, your Recruiter will be asking you a series of questions that are designed to ensure your safety. **These questions will need to be answered honestly.**

## Pre-Physical Activity Question

1. Do you have chest pain (with or without exertion), bone or joint pain, high blood pressure or high cholesterol? If yes, have you been cleared by your medical provider to participate in PT?
2. Have you had a change in your medical status since the last time you were asked these questions?
3. Are you ill today or know of any medical condition that may prevent you from participating in physical activity today?
4. Do you know of any other reason why you should not do any physical activity?
5. Are you a female who could possibly be pregnant?
6. Are you dressed in attire not suitable for physical training? (i.e., street attire, footwear not designed for running, vinyl/plastic clothing meant to enhance perspiration, etc.)

If you have answered yes to any of the above questions, you will not be allowed to participate in the organized Physical Training or be allowed to take the Initial Fitness Assessment. If you are currently suffering from any self-limiting illness or injury (cold, flu, surgery) you will not be permitted to participate in the organized Physical Training or the Initial Fitness Assessment.



# FITNESS AND NUTRITION PLAN

## Introduction

This Fitness and Nutrition Guide provides basic guidelines for the three primary elements of a physical fitness program: cardio-respiratory activity, muscular strength and endurance exercises, and flexibility exercises. Research supports that participation in these activities prior to entering RTC, OCS/ODS will decrease your injury risk during initial training.

## Nutrition Overview

Nutrition is vital in maintaining a healthy diet and providing your body with the proper nutrients needed for a lifestyle which promotes fitness and overall health. Excess weight and poor nutrition may lead to poor health and an increased risk of injury while you are at RTC, OCS/ODS.

## Nutrition

In order to be physically fit, you must be nutritionally fit. This section provides guidance on properly fueling your body to achieve your performance goals. Nutrition is important in all that you do. Paying more attention to what you eat and drink, can improve your mood, energy level, self-confidence, physical and mental performance and overall health.

Your body is like a car. How well it performs is based on:

- Quality Fuel = Good Nutrition and Hydration
- How well it is Tuned = Exercise
- How much Drag Factor = Excess Weight

**Here are some helpful guidelines to follow:**

- Eat Breakfast everyday
- Enjoy your food, but eat less. Avoid oversized portions
- Be active 60 minutes per day
- Eat three small, nutrient-dense, balanced meals, 2-3 small nutrient-dense snacks, and stay hydrated throughout the day. Eat a snack or small meal within 10-60 minutes following exercise.
- Set realistic goals for fitness and weight loss: No more than 1-2 pounds of weight loss per week.
- Track your food intake on a food log (chart provided on pg.8)
- Write down specific and measureable nutrition and fitness goals
- Ensure you stay hydrated. Drink a minimum of eight 8 oz glasses of water daily. Don't rely on thirst.
- Make half your plate fruits and vegetables. Choose three colors for every meal.
- Make at least half of your grains whole grains (look for the word "whole" as the first ingredient)
- Choose lean protein (non-fried chicken, fish, pork, beef, eggs, or beans)
- Limit or avoid sugary beverages (soda, energy drinks, fruit punch)
- No more than one dessert or sweet per day (around 150-200 calories)
- Sleep 7-8 hours per night
- Get support from your Recruiter, family and friends. Never Give Up!

During the course of the day snacking on foods that provide a high amount of nutrients can help keep energy levels high and minimize performance degraders such as high salt, sugar and saturated fat. Convenient performance snacks include:

- Whole Grains: instant oatmeal, high fiber crackers, whole wheat bread, 100 calorie popcorn
- Lean Protein: hummus, tuna, soybeans, hard boiled eggs, string cheese, lean deli meats
- Vegetables: cherry tomatoes, baby carrots, peppers, low sodium vegetable juice or soup
- Low Fat Dairy: Skim or 1% milk, soy milk, low fat yogurt, cottage cheese
- Fruit: apple, orange, banana, grapes, kiwi, strawberries, dried fruit
- Healthy Fats: nuts in 1 oz portions, seeds, peanut or almond butter

## Meeting Weight Standards

If you need to lose weight, the most effective way is to make wise food choices and include regular physical activity. Diets and skipping meals do not work in the long run, and should not be attempted as a means of rapid weight loss!

The resources on the following pages will help you create and maintain a more effective meal plan. How much you eat will depend on your age, weight, activity levels and your performance goals.

## How to Build a Sound Nutrition Plan: Secrets to Success

### Build a Better Meal Plan

First, go to the virtual meal builder at:

[http://www.navyfitness.org/nutrition/noffs\\_fueling\\_series/interactive\\_mealbuilder/](http://www.navyfitness.org/nutrition/noffs_fueling_series/interactive_mealbuilder/)

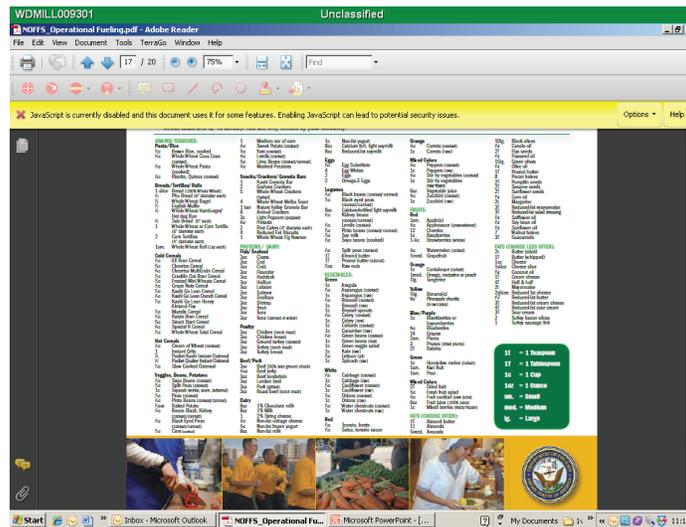
To generate a meal template, enter your gender, goal (weight loss, maintenance or gain) and current weight. The pattern is based on exercising three to five times per week.

The meal template includes an appropriate amount of calories and food groups toward your goals.

The screenshot shows the 'Virtual Meal Builder' interface on the Navy Fitness website. The page is titled 'Virtual Meal Builder' and is part of the 'NOFFS Fueling Series'. It features a navigation menu with options like Home, Fitness, All-Navy Sports, Deployed Forces Support, Nutrition, SHAPE, and News. The main content area includes a form for entering 'Gender' (Male), 'Goal' (Weight Loss), and 'Current Weight' (161-190). Below this is a table for 'Zone 2' showing recommended servings for various food groups across different meals. A 'Downloads' section is also visible, offering 'Food Selections and Serving Sizes'. The right sidebar contains a 'NOFFS Fueling Series' menu with links to 'Rules to Live By', 'The Big Three', 'Eat the Rainbow', 'Fuel Up', 'Hydrate', 'Recovery Nutrition', and 'Virtual Meal Builder' (which is currently selected).

	Breakfast	Snack	Lunch	Snack	Dinner	Snack
Grains	2	**	2-3	1	2-3	**
Protein/Dairy	1-2	**	2	**	2	1
Fruits	1-2	1-2	1	**	**	1-2
Veggies	**	**	3	**	3	**
Fats	1-2	1	1-2	1	2	**
OR						
Meal Replacement	**	1+Fruit	**	1+Fruit	**	1+Fruit
Total Calories	460-520	170-200	575-650	230-260	575-650	230-260

The portions included in the meal plan are listed in the Nutrition Blueprint And Builder (click Download) shown in the screen shot below. Example: 2 grains may include one and a half servings of cold cereal or 2 slices of wheat toast. Be flexible and include a variety of foods, especially colorful fruits and vegetables.



You may need to tweak the plan based on your response and changes in weight.

There is no magic pill or fad diet that will help you achieve the results that you desire to achieve. Following these simple steps will help you prepare physically for RTC, OCS/ODS:

Learning and practicing sound nutrition habits is the foundation of a physically fit Sailor. Before looking for performance enhancing supplements, get the basics down first. Websites for more assistance:

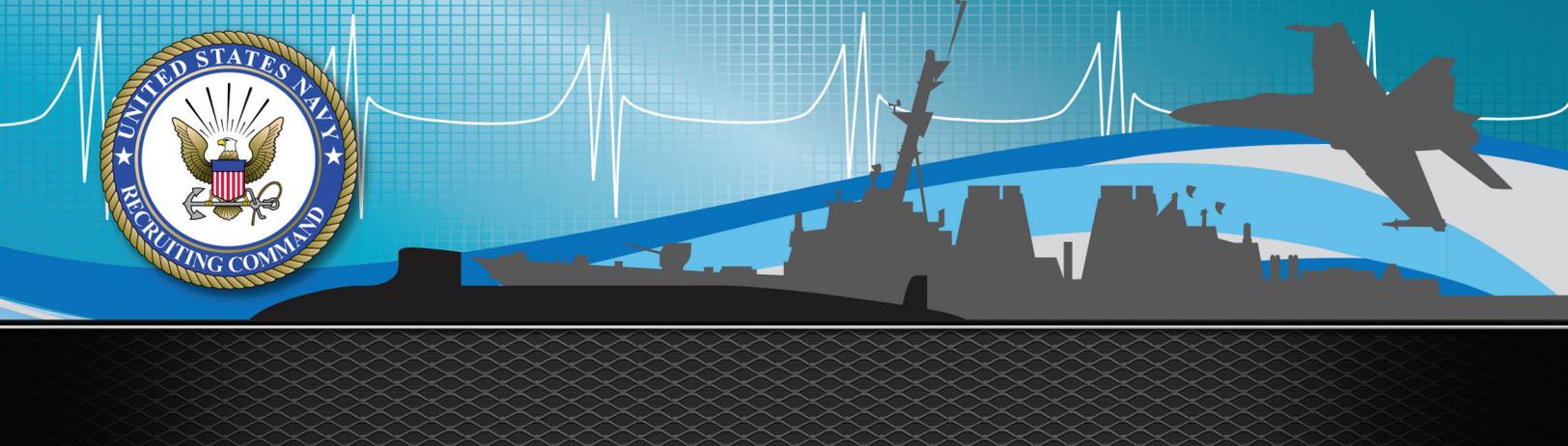
Navy Operational Fueling Series <http://www.Navfitness.org/fitness/nffs>

Navy and Marine Corps Public Health Center Healthy Living [http://www.nmcphc.med.navy.mil/healthy\\_living/](http://www.nmcphc.med.navy.mil/healthy_living/)

Choose dietary supplements wisely <http://www.hprc-online.org>

Balanced Nutrition <http://www.choosemyplate.gov>

Keeping a food diary (see example on following page) is one of the most effective tools for making changes to the way that you eat. Create your own diary and write down everything you eat and drink for several days to identify trends and assist in making improvements.



Exchange	Amount	Food
<b>Breakfast</b>		
Grain		
Protien		
Vegetable		
Fruit		
Dairy		
Fat		
Water		
<b>Snack</b>		
<b>Lunch</b>		
Grain		
Protien		
Vegetable		
Fruit		
Dairy		
Fat		
Water		
<b>Snack</b>		
<b>Dinner</b>		
Grain		
Protien		
Vegetable		
Fruit		
Dairy		
Fat		
Water		
<b>Snack</b>		

## Physical Fitness Overview:

Physical fitness is an essential and critical component of readiness. Physical health and fitness is much more than the absence of disease. It is a state of being that includes strong, flexible muscles, tendons and joints and an efficient system for getting oxygen and nutrients to the body. An enhanced level of fitness is achievable by everyone, despite body type, family health history and past habits. A physical activity program includes 3 primary components:

**Cardio-respiratory activities:** These activities include aerobic activities, such as running, walking, swimming, bicycling, or the use of cardiofitness machines that help the heart, lungs and blood vessels become more effective at delivering oxygen and glucose.

**Muscular Strength and Endurance:** These activities include a variety of resistance exercises such as push-ups, curl-ups, squats, or weight training. Muscular strength and endurance activities help your muscles become stronger, giving them both the raw strength and ability to work repeatedly without undue fatigue.

**Flexibility:** Flexibility or stretching exercises are necessary to prevent injury to the muscles, tendons, ligaments, and joints while increasing efficiency through a full range of motion.

### Workout System Introduction

The Navy Operational Fitness and Fueling Series (NOFFS) is designed to provide the Navy with a “world-class” performance training resource for Sailors. Using the latest sports science methodologies, the logic engine for NOFFS combines both human performance and injury prevention strategies, resulting in safer training while yielding positive human performance outcomes. The exercises used in the NOFFS product are designed to replicate the activities Sailors conduct in their operational duties: lifting, pushing, pulling and carrying. Developed as a complete fitness package, it includes Nutrition and Fueling information. All of the NOFFS resources can be downloaded from <http://www.navyfitness.org/fitness/noffs/downloads/>.

Use NOFFS Large Deck Level 1 Series (below). You will work through a dynamic warm-up (Pillar Preparation and Pillar Movement) strength training exercises, cardio conditioning exercises or traditional cardiovascular training (running, elliptical, bicycle) and finally, recovery/stretching. The guide is complete. Following it as it is designed using all the steps as they are described, you will achieve the best results. There are full video descriptions of all NOFFS exercises at <http://www.navyfitness.org/fitness/noffs/> click on either the Virtual Trainer or the Movement Library.

Some NOFFS exercises use resistance bands. If you do not have bands or weights, skip these exercises, complete the exercise series using your own body weight and proceed with the guide. While using the Recovery (Stretching) Section of the guide, there are two options available. The first is for the use of a stretch assist strap and the second offers direction for those who are not using a strap. In either situation, make sure you follow the guide carefully to achieve the best possible results.

In Large Deck Level 1 Series, you should start with stage A and move through the stages to stage D as your strength and cardio conditioning increases. When you have mastered Level 1, and only when you have mastered level 1, then you can proceed to Level 2 and eventually, Level 3. To help prevent injury it is important to follow the guide, and to not move to the next higher level until you are ready. One of the keys to success with the NOFFS system is using the correct form. Form, more than any other aspect, is critical to the success of your fitness training.

# LARGE DECK SERIES - LEVEL 1



**Navy Operational Fitness Series**

# LARGE DECK SERIES

## NAVY OPERATIONAL FITNESS



### 3 Simple Steps to Get Started!

#### **Step 1: Choose a Level**

This card series progresses you through 3 levels of training, each with 4 stages. Each level and stage will progressively increase the intensity and volume of the training session. If you are new to this programming start with level 1 to become familiar with the movements and set a solid foundation for your performance to build on. Progress to the next stage when you have successfully completed the prescribed number of circuits in the allotted time. Progress to the next level when you successfully complete Stage D with perfect technique in the desired time. If you are advanced it may not be long until you advance to the next level, however, it is very important to take the time during each stage to achieve mastery of the technique before increasing the resistance and advancing to the next level.

#### **Step 2: How long do you want to work out?**

Each program has three different lengths of workouts. Choose a workout time and follow the program that best fits your schedule. If you are new to the movements throughout the card series the duration of the workouts may be slightly longer. However, as you become familiar with the programming you will be able to complete the programs in the allotted time. Select a time below and follow the color dots throughout the training session.

● Short = 30 minutes

● Medium = 45 minutes

● Long = 60 minutes

#### **Step 3: Start your Program!**

Your training session will consist of 5 training components. Work through each component to complete your training session.

##### **1. Pillar Preparation**

- Your Pillar – which consists of your hips, torso, and shoulders – represents the foundation for all your movement. “Pillar Prep” primes these critical muscles to prepare your body for the work ahead – helping to protect you from injury and boost your performance during your training session.

##### **2. Movement Preparation**

- Lengthen, strengthen, and stabilize your body. “Movement Prep” consists of a series of active and dynamic stretches to help prepare you to move.

##### **3. Strength**

- Strengthen the movements needed to perform on an operational platform. Pay close attention to the quality of your movement. Select a resistance that you feel challenged with for the number of reps prescribed.

##### **4. Cardiovascular Fitness**

- Boost your endurance, leg strength, and speed through a variety of interval training options. The movements in this component are designed to target and develop your energy systems while efficiently burning calories.

##### **5. Recovery**

- A critical component to any training program, recovery brings balance back to your body, helping to relieve tension and the associated aches and pains while enhancing your body’s response to the training.

#### **Training Frequency:**

It is recommended to try to complete 3-4 training sessions per week. On recovery days, you can include the Warm up (Pillar Prep & Movement Prep) and Flexibility routines to assist in the recovery process and prepare you for your next training session.

# LARGE DECK SERIES

## WARM UP & STRENGTH - LEVEL 1



### Warm Up = Pillar Preparation & Movement Preparation

#### Pillar Preparation

Your Pillar – which consists of your hips, torso, and shoulders – represents the foundation for all your movement. “Pillar Prep” primes these critical muscles to prepare your body for the work ahead – helping to protect you from injury and boost your performance during your training session.

Stage:	A	B	C	D
No. of Circuits:	1	1	1	1
Reps:	6	6	8	10

● Short ● Medium ● Long

● 1

#### PILLAR BRIDGE (\*30 SEC HOLD)

- Push up tall on your elbows & tuck chin so head is in line with body
- Maintain a straight line from ears to ankle
- Feet shoulder width apart
- Hold for 30 seconds



● 3

#### Y'S - DECK

- Lie on the deck face down, place towel under head for comfort
- Glide shoulder blades back & down & raise your arms over your head to form a Y
- Initiate movement with shoulder blades, not arms & keep thumbs up throughout
- Return to start position & repeat for reps



● 2

#### GLUTE BRIDGE (\*30 SEC HOLD)

- Lift hips to create a line through knees, hips & shoulders
- Keep back flat & torso engaged throughout the movement
- Keep toes pulled up to your shins
- Hold for 30 seconds



● 4

#### 90/90 STRETCH

- Place a rolled towel between your knees
- Keep arms straight at a 90° angle to your torso
- Keep hips still while rotating chest & arm back
- Exhale & hold for 2 sec, return to starting position & repeat
- Complete reps, repeat on opposite side



**Movement Preparation**

Specifically designed to lengthen, strengthen, and stabilize your body, "Movement Prep" consists of a series of active and dynamic stretches to help prepare you to move. Execute each movement with control and purpose.

Stage:	A	B	C	D
No. of Circuits:	1	1	1	1
Reps:	4	4	6	6

● Short ● Medium ● Long

● 1



**MINI BAND - EXTERNAL ROTATIONS**

- Stand in quarter-squat position with feet hip width & band just above knees.
- Let one knee drop in & return to starting position
- Complete reps, then repeat on opposite side

● 4



**KNEE HUG - IN PLACE**

- Lift one leg off the deck & squat back & down on the opposite leg
- Take hold just below your knee & pull towards your chest as you stand tall on the opposite leg
- Keep your weight in the middle of your foot, chest up & contract the glute of your stance leg
- Move with control, & alternate sides each rep

● 2



**REVERSE LUNGE, ELBOW TO INSTEP - KNEELING**

- Kneeling, take half step forward with left foot
- Place right hand on deck & left elbow inside of left foot. Hold for 2 sec
- Place left hand outside foot & push hips to the sky
- Complete reps, then repeat on opposite side

● 5



**DROP LUNGE**

- Reach one foot across & behind, square hips forward, & sit back & down into a squat
- Maintain weight primarily on front leg, keep your chest up, torso engaged & sit hips back
- You should feel a stretch in the outsides of both hips
- Complete reps, then repeat on opposite side

● 3



**LATERAL SQUAT - ALTERNATING**

- Stand with feet wider than shoulder width apart, shift hips to the side & down
- Push through your hip to return to start position
- Keep your opposite leg straight, back flat & your chest up
- Alternate sides each rep

● 6



**INVERTED HAMSTRING W/ SUPPORT**

- Keep straight line from ear to ankle, hinge at waist & elevate your leg behind you
- When you feel a stretch, return to the standing position by contracting glute & hamstring
- Keep stance leg slightly unlocked, back flat & shoulders & hips parallel to deck
- Complete reps, then repeat on opposite side

**Select 1 Strength Option:**  
**FIT KIT EQUIPMENT or FULL EQUIPMENT**

Stage:	A	B	C	D
Reps:	8	10	12	15

**Option A: Strength – Fit Kit Equipment**

This strength option takes advantage of the FIT KIT equipment using bands and body weight as the primary source of resistance. This component is designed to strengthen the movement needed to perform on an operational platform. Pay close attention to the quality of your movement, once comfortable, select a resistance that you feel challenged with and adjust the tension of the bands by wrapping the band on your foot.

	Circuit 1	Circuit 2
● Short	x2	x1
● Medium	x2	x2
● Long	x3	x2

**Circuit 1**

**1**



**GLUTE BRIDGE (REPS)**

- With feet shoulder width, lift hips to create a line from knees, hips, and shoulders
- Keep back flat & torso engaged throughout the movement
- Keep toes pulled up to your shins

**Circuit 2**

**1**



**LATERAL SQUAT – LOW ALTERNATING**

- Stand with feet wider than shoulder width apart, shift hips to the side & down
- Keeping your hips low the entire time, push through your hip to shift your weight onto the opposite leg
- Move with control & keep your chest up throughout the movement
- Alternate sides each rep

**2**



**PUSH UP**

- Assume a push up position with hands & feet on the deck
- Maintain a straight line from your knees to your ears as you complete the push up
- Push your sternum away from your hands at the top of the movement

**2**



**OVERHEAD PRESS – 1/2 KNEELING (BANDS)**

- Half kneel with back knee on a towel with a tall posture
- Wrap the band on your front foot & hold handle in each hand
- Press the bands straight overhead, keeping your arms in line with your body
- Switch leg positions each set

**3**



**SQUAT W/ MINI BAND**

- Place mini band just above knees
- Squat hips back and down until thighs are parallel with deck
- Return to standing by pushing through your hips
- Keep weight on arches and do not let knees collapse during the movement

**3**



**LATERAL PILLAR BRIDGE (\*30 SEC HOLD)**

- Lie on your side with your forearm on the deck under your shoulder - feet stacked together
- Keep body in a straight line from your ear to your ankles
- Hold for 30 seconds
- Complete for time, repeat on opposite side

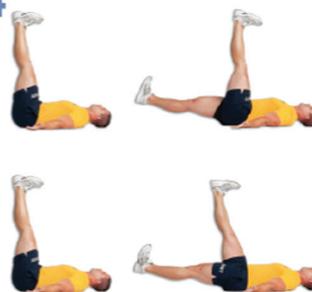
**4**



**Y'S – BENT OVER (BANDS)**

- Hinge at waist, back flat & chest up
- Glide shoulder blades back & down & raise your arms over your head to form a Y
- Initiate movement with shoulder blades, not arms & keep thumbs up throughout

**4**



**STRAIGHT LEG LOWERING – ALTERNATING**

- Slowly lower your straight leg down until you feel your pelvis about to start moving
- Keep your torso engaged & back flat
- Return to starting position & repeat to the opposite side, continue for prescribed reps
- Alternate sides each rep

**Select 1 Strength Option:  
FIT KIT EQUIPMENT or FULL EQUIPMENT**

**Option B: Strength – Full Equipment**

This strength option takes advantage of the FIT KIT equipment using bands and body weight as the primary source of resistance. This component is designed to strengthen the movement needed to perform on an operational platform. Pay close attention to the quality of your movement, once comfortable, select a resistance that you feel challenged with and adjust the tension of the bands by wrapping the band on your foot.

Stage:	A	B	C	D
Reps:	12	10	8	6

	Circuit 1	Circuit 2
● Short	x2	x1
● Medium	x2	x2
● Long	x3	x2

**Circuit 1**  
**1**



**ROMANIAN DEADLIFT - DUMBBELL**

- Stand with tall posture while holding a dumbbell in both hands, using an overhand grip
- With torso engaged, hinge over at the waist and begin lowering the DBs close to your shins
- Return to starting position by contracting your glutes & hamstrings

**Circuit 2**  
**1**



**LATERAL SQUAT – DUMBBELL ALTERNATING**

- Start with feet wider than shoulder width, shift hips to the side & down
- Push through your hip to return to start position
- Keep your opposite leg straight, your back flat & your chest up
- Alternate sides each rep

**2**



**BENCH PRESS – DUMBBELL**

- Lie face up on a bench, dumbbells over shoulders, your palms facing your thighs
- Lower dumbbells until arms just break parallel with deck, then push back up
- Keep torso engaged & back flat during the movement

**2**



**GLUTE BRIDGE – 1 LEG**

- Lying on your back, with knees bent & toes pulled up towards shins, lift one knee to your chest
- Lift your hips off the deck until your knee, hips & shoulders are in a straight line – hold for 2 seconds
- Keep back flat & torso engaged throughout the movement
- Complete reps, repeat on opposite side

**3**



**SQUAT – W/ MINI BANDS**

- Place a mini band around & just above your knees
- Squat hips back & down until your thighs are parallel to the deck
- Return to standing by pushing through your hips, keeping your knees facing forwards

**3**



**LATERAL PILLAR BRIDGE (\*30 SEC HOLD)**

- Lie on your side with your forearm on the deck under your shoulder. Feet stacked together
- Keep body in a straight line from your ear to your ankles
- Hold for 30 seconds
- Complete for time, repeat on opposite side

**4**



**BENT OVER ROW - DUMBBELL**

- Stand hinged over at the waist, knees slightly bent, holding dumbbells in each hand
- Slide shoulder blades toward your spine & then lift the weights to your body by driving elbows to the ceiling
- Keep torso engaged & back flat during movement

**4**



**STRAIGHT LEG LOWERING – ALTERNATING**

- Slowly lower your leg straight down until you feel your pelvis about to start moving off the deck
- Keep your torso engaged & back flat
- Return to starting position & repeat to the opposite side, continue for prescribed reps
- Alternate sides each rep

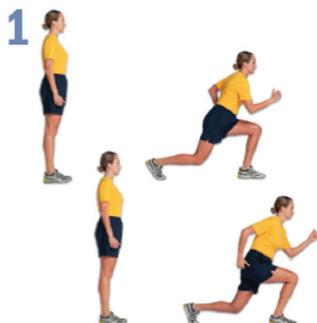
**Select 1 Cardio Option:**  
**METABOLIC or EQUIPMENT BASED or DECK BASED**

**Metabolic Circuit**

Perform each movement for the time prescribed and then immediately transition into the next movement for the duration of the "Work" interval. Recover for the duration of the "Rest" interval and repeat. Form and technique are critical to pay attention to during the circuit, work hard but stay focused throughout.

**LEVEL 1**

Time Per Movement	Rest Between Circuits	Number of Circuits
15 sec ea.	1:30	<span style="color: blue;">●</span> Short x2 <span style="color: orange;">●</span> Med x3 <span style="color: grey;">●</span> Long x4



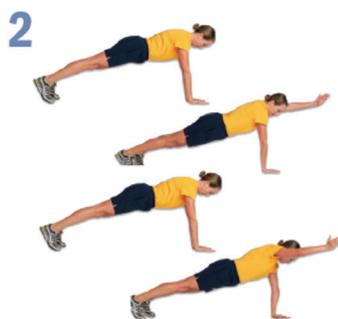
**1 REVERSE LUNGE – ALTERNATING**

- Contract your back glute at the bottom of the lunge
- Return to standing by pushing through your front hip
- Keep chest up, don't let your back knee touch the deck
- Alternate sides each rep



**5 PLANK – RUNNING**

- Start in push up position with hands beneath shoulders, one knee toward chest, one straight
- Begin to alternate leg positions while keeping torso engaged & hips still
- Keep your back flat throughout the entire movement



**2 PILLAR BRIDGE - W/ ARM LIFT**

- Alternate reaching up & out with arms – hold 2 sec ea.
- Keep shoulders & hips square to deck with arm reach
- Keep torso engaged during movement



**6 SINGLE LEG BALANCE - ALPHABET**

- Sit your hips down & back into a quarter squat
- With 'floating' foot spell the alphabet with toe for prescribed time
- Keep your torso & hip engaged throughout the movement
- Alternate legs every 5 sec until working time elapsed



**3 LATERAL LUNGE - ALTERNATING**

- Step to the right with your right foot, keeping your toes forward & your feet flat
- Squat through hip while keeping your opposite leg straight
- Keep your back flat & your chest up
- Push through your hip to return to standing, and alternate sides each rep



**7 SPLIT SQUAT - ALT. 5 SEC HOLDS**

- Take a low split position with your weight primarily supported on your front leg
- Keep your torso engaged, tall posture & don't let knee touch the deck
- Alternate legs every 5 sec until working time elapsed



**4 FORWARD LUNGE, ELBOW TO INSTEP - W/ ROTATION**

- Place left hand on deck & right elbow inside of right foot. Hold for 2 sec
- Rotate your right arm & chest to the sky. Hold for 1 to 2 seconds & return
- Place right hand outside foot & push hips to the sky
- Keep back knee off deck & contract rear glute



**8 DROP LUNGE – ALTERNATING**

- Reach one foot across & behind, square hips forward & sit back & down into a squat
- Maintain weight primarily on front leg, keep your chest up, torso engaged & sit hips back
- You should feel a stretch in the outsides of both hips
- Alternate sides each rep

How hard should I work?

**Heart Rate (HR) Based Training**

If you have a HR monitor you can measure the intensity of your workout based on your HR response. These HR training zones can be created from an estimated Max HR, based on the following general formula:

**Max HR = 220 – Age.**

From this number use the percentages from the table above to determine your HR training zones for each interval intensity. During your training, if you notice your HR goes higher than your calculated Max HR, simply replace the calculated Max HR with your observed Max HR and re-calculate the percentages for each HR zone.

**Rate of Perceived Exertion (RPE)**

Your Rate of Perceived Exertion (RPE) is a simple and effective way to determine the training intensity during the prescribed intervals. The scale goes from 1-10. A rating of 1 would be equivalent to standing still, while a rating of 10 would be representative of the most strenuous level of activity you could possibly sustain. Here are some general guidelines to follow throughout your training.

Intensity	Rate of Perceived Exertion	% of Max Heart Rate
Easy	5 out of 10	65%
Moderate	7 out of 10	80%
Hard	9 out of 10	90%
Max	10 out of 10	100%

- 5/10** You should be moving with a purpose, but you should still be able to carry a comfortable conversation.
- 7/10** Your breathing should be more rapid and you should not be able to carry a conversation.
- 9/10** An extremely strenuous effort. Breathing should be rapid and the effort should be difficult to maintain.
- 10/10** Maximum effort. Give it all you got!

**Equipment Based Option (Bike, Treadmill, Elliptical)**

Select a piece of cardio equipment and follow the appropriate interval training session below. Start the session with 2-5 minutes of easy effort to warm up. Equipment based training can help to reduce the impact on your body throughout your conditioning. Cross training is an effective way to challenge the body, so try to mix up the equipment you select when possible.

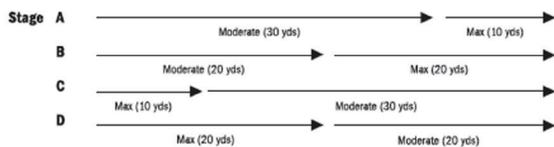


Level 1:	Moderate	Easy	● Short	● Medium	● Long
<b>Stage A</b>	3 min	2 min	x2	x3	x4
<b>B</b>	3 min	2 min	x2	x3	x4
<b>C</b>	4 min	1 min	x2	x3	x4
<b>D</b>	5 min	1 min	x2	x3	x4

**Deck Based Option - Linear Accelerations**

Deck based conditioning focuses on powerful transitions when accelerating and decelerating, while being simple enough to elevate your HR and develop leg strength. During your work intervals hit the prescribed effort levels, during the rest intervals walk or jog the pattern at your own pace to ensure full recovery before next interval begins.

Stage:	Pattern	Work	Rest	● Short	● Medium	● Long
<b>A</b>	30 yds Moderate/10 yds Max	2 min	1 min			
<b>B</b>	20 yds Moderate/20 yds Max	2 min	1 min	x3	x5	x7
<b>C</b>	10 yds Max /30 yds Moderate	2 min	1 min			
<b>D</b>	20 yds Max /20 yds Moderate	2 min	1 min			



**Set Up:**

- Set up 5 cones or markers 10 yds apart for a total distance of 40 yds as shown in the diagram
- Set up the cones with room to spare after the last cone to allow you to run through the last cone on each sprint

**Procedure:**

- Select the appropriate pattern, work-to-rest ratio, and repeats for the stage you are on
- Start with a light jog, back and forth, through the pattern for 2 minutes to warm up
- During the Work interval run the pattern at the prescribed intensity (see chart)
- After passing the last cone in the pattern, turn around and repeat the pattern in the opposite direction. Continue to repeat for the duration of the work interval.
- During the Rest interval walk or jog between the two end cones

**Coaching Keys:**

- Refer to the "Intensity Tables" above to determine your work interval intensities based on RPE or HR
- Focus on distinct change of speeds between Moderate and Max Intensities
- Keep your movement clean as you accelerate through the drill
- When working in large groups, set up multiple sets of cones and divide the group appropriately – you can start people at either end of the cones to increase numbers of people per cones

**Flexibility - Stretch Strap**

The following flexibility exercises will help bring balance back to your body, relieving tension and the associated aches and pains. Active-isolated stretching will help lengthen short or stiff muscles by re-programming your muscles to contract and relax through new ranges of motion.

**Hold each stretch for 2 seconds while exhaling, then relax back to the start position and continue for 10 reps each. Do not bounce through the end range of the stretch.**

1



**CALF STRETCH (STRAP)**

- Lie on back with stretch strap wrapped around right foot & leg raised 45 degrees in the air
- Actively pull your right foot to your shin & then give assistance with the rope
- Exhale during the stretch Actively pull your foot to your shin even when assisting with the strap
- Complete reps, repeat on opposite side

4



**ABDUCTOR STRETCH (STRAP)**

- Wrap the stretch strap around foot & outside of leg
- Actively raise leg across body, gently assist with strap until you feel a stretch
- Keep opposite leg on ground by reaching long through heel, toes pointed to the sky
- Complete reps, repeat on opposite side

2



**STRAIGHT LEG HAMSTRING STRETCH (STRAP)**

- Keep right leg straight, actively raise it, then give gentle assistance with stretch strap until you feel a stretch
- Keep opposite leg on ground by pushing heel far away from your head as possible
- Contract your glute. Pull the strap above your head
- Complete reps, repeat on opposite side

5



**QUAD STRETCH (STRAP)**

- Lie on your stomach with a stretch strap wrapped around one foot
- Actively bend knee, gently assist with stretch strap until you feel a stretch
- Contract the glute on the leg that is being stretched Keep your back flat & torso engaged during the stretch
- Complete reps, repeat on opposite side

3



**ADDUCTOR STRETCH (STRAP)**

- Wrap the stretch strap around foot & inside of lower leg
- Actively raise leg out to the side, gently assist with strap until you feel a stretch
- Keep opposite leg on ground by reaching long through heel, toes pointed to the sky
- Complete reps, repeat on opposite side

6



**SHOULDER/TRICEPS STRETCH (STRAP)**

- Hold the stretch strap behind head with one hand reaching over and one hand reaching under
- Actively reach top hand down back, gently assist by pulling strap with bottom hand
- Next, actively reach bottom hand up, gently assist by pulling rope with top hand
- Complete reps, repeat on opposite side

**Flexibility - No Equipment**

The following flexibility exercises will help bring balance back to your body, relieving tension and the associated aches and pains. Active-isolated stretching will help lengthen short or stiff muscles by re-programming your muscles to contract and relax through new ranges of motion.

**Hold each stretch for 2 seconds while exhaling, then relax back to the start position and continue for 10 reps each. Do not bounce through the end range of the stretch.**

1



**BENT KNEE HAMSTRING STRETCH**

- Pull knee to chest, grasping behind the knee with both hands
- Actively straighten knee, gently assist with hands until you feel a stretch
- Keep opposite leg on ground by reaching long through heel, toes pointed to the sky
- Complete reps, repeat on opposite side

4



**QUAD/HIP FLEXOR STRETCH - 1/2 KNEELING**

- Keep a slightly forward lean in torso, engage torso & contract the glute of your back leg
- Maintain posture, shift body slightly forward. Exhale & hold the stretch for 2 seconds
- Avoid excessive arching in your lower back
- Complete reps, repeat on opposite side

2



**KNEE HUG - SUPINE**

- Actively lift knee to your chest, gently assist by grabbing the knee & pulling it closer to chest
- Exhale & hold the stretch for 2 seconds, then return to the starting position
- Keep your non stretching leg flat on the floor by pushing the bottom of your heel away from your head
- Complete reps, repeat on opposite side

5



**TRICEPS STRETCH**

- Lift one arm over head & reach hand down your back, gently assist with opposite hand
- Exhale & hold for 2 seconds, then relax & repeat
- Keep your back flat & torso engaged throughout the stretch
- Complete reps, repeat on opposite side

3



**LEG CRADLE - SUPINE**

- Actively lift knee to your chest, placing one hand on knee & one under ankle
- Pull leg to chest with both hands into a gentle stretch
- During the movement, contract the glute of the leg that's on the ground
- Complete reps, repeat on opposite side



6



**90/90 STRETCH - W/ ARM SWEEP**

- Lie with left knee bent 90°, your right leg crossed over the left
- Roll onto left side with knee and the deck
- Keep hips still, rotate chest & sweep with long arm - palm up, bending your elbow at the end reaching for your back pocket - palm down. Hold 2 sec
- You should feel a stretch through your torso, mid/upper back, chest & shoulder
- Complete reps, repeat on opposite side

# INITIAL FITNESS ASSESSMENT

Before your scheduled date to depart for Recruit Training Command or Officer Candidate School, you may have the opportunity to take the Initial Fitness Assessment (IFA). This assessment is strictly voluntary, but it will help you and your Recruiter determine your level of fitness. You will be required to successfully complete the elements of the IFA (known as the Physical Readiness Test (PRT)) throughout your naval career as this test is given semi-annually throughout the Navy.

The Initial Fitness Assessment is a three-part fitness test that measures your overall Physical Fitness. [Note to Recruiters: This test will not be administered in extreme weather conditions. It will be conducted in accordance with all of the safety precautions outlined in OPNAVINST 6110.1 series.] Your overall health and safety are the primary concerns of the Navy. If at any time while you are participating in the IFA, you feel dizzy, or feel that you cannot continue, you are to immediately STOP and notify Recruiting personnel administering the IFA, who are CPR qualified and are continuously monitoring your health and well-being before, during, and after the IFA. The following section is an overview of the four events that comprise the IFA. The Navy PRT Score Categories are included on pages 22. You will be expected to score a “good” score for your age group during Initial Training in each of the following three phases that comprise the PRT.

## (1) Curl-Ups

Curl-ups are a good exercise for strengthening the abdominal muscles. Curl-ups must be done with the knees flexed to 90 degrees to eliminate the curve in the low back. The abdominal muscles should be contracted. The head should be lifted off the floor and the trunk should curl into the sit-up position. Alteration of this technique may cause additional strain to the low back. It is necessary only to do a partial curl-up to provide maximal benefit to the abdominal muscles. A full sit-up may place additional stress on the lower back.

### **Curl-Ups during Initial Training and Physical Readiness Testing:**

During the initial training physical regimen and during the Navy’s semi-annual Physical Readiness Testing, curl-ups will be performed similarly, but your arms will be folded across the chest, and a partner will hold your feet to the floor. You will curl-up touching elbows to thighs (Diagram 5) and will then lie back touching shoulder blades to deck (Diagram 6).



(Diagram 5)



(Diagram 6)

## (2) Push-Ups

Push-ups are a measure of your upper body strength (chest, shoulders and triceps). Always use correct form to prevent injury and to improve core strength and performance.

1: Start in the rest position (Diagram 7). Assume the front leaning position with hands approximately shoulder width apart and feet together. The arms, back, buttocks and legs must be straight from head to heels and must remain so throughout the push-up.

2: Begin the push-up by bending the elbow and lowering the entire body until the top of the upper arms are parallel to the deck (Diagram 8) and the elbows are bent at a 90 degree angle.

Remember to keep the arms, back, buttocks and legs aligned throughout the push-up motion.

3: Return to the starting position by extending the elbows until the arms are almost straight. Do not lock your elbows (Diagram 7).



(Diagram 7)



(Diagram 8)

## (3) 1.5-mile run and/or walk:

This event consists of running or walking 1.5 miles as quickly as possible. Any combination of running or walking is allowed to complete event.



# U S NAVY PRT STANDARDS

Males: Age 17–19 years				
Performance	Points	Curl-ups	Push-ups	1.5 mile run
Maximum	100	109	92	8:15
Outstanding	90	102	86	9:00
Excellent	75	90	76	9:45
Good	60	62	51	11:00
Satisfactory	45	50	42	12:30
Failure	<45	<50	<42	<12:30
Males: Age 20–24 years				
Maximum	100	109	87	8:35
Outstanding	90	98	81	9:15
Excellent	75	87	71	10:30
Good	60	58	47	12:00
Satisfactory	45	46	37	13:30
Failure	<45	<46	<37	<13:30
Males: Age 25–29 years				
Maximum	100	101	84	8:55
Outstanding	90	95	77	9:38
Excellent	75	84	67	10:52
Good	60	54	44	12:53
Satisfactory	45	43	34	14:00
Failure	<45	<43	<34	<14:00

Females: Age 17–19 years				
Performance	Points	Curl-ups	Push-ups	1.5 mile run
Maximum	100	109	51	9:29
Outstanding	90	102	47	11:30
Excellent	75	90	42	12:30
Good	60	62	24	13:30
Satisfactory	45	50	19	15:00
Failure	<45	<50	<19	<15:00
Females: Age 20–24 years				
Maximum	100	105	48	9:47
Outstanding	90	98	44	11:30
Excellent	75	87	39	13:15
Good	60	58	21	14:15
Satisfactory	45	46	16	15:30
Failure	<45	<46	<16	<15:30
Females: Age 25–29 years				
Maximum	100	101	46	10:17
Outstanding	90	95	43	11:45
Excellent	75	84	37	13:23
Good	60	54	19	14:53
Satisfactory	45	43	13	16:08
Failure	<45	<43	<13	<16:08



# MAXIMUM WEIGHT FOR HEIGHT CHART

Men Maximum Weight (pounds)	Member's Weight (Inches) (fractions rounded off to nearest whole inch)	Women Maximum Weight (pounds)
127	57	127
131	58	131
136	59	136
141	60	141
145	61	145
150	62	149
155	63	152
160	64	156
165	65	160
170	66	163
175	67	167
181	68	170
186	69	174
191	70	177
196	71	181
201	72	185
206	73	189
211	74	194
216	75	200
221	76	205
226	77	211
231	78	216
236	79	222
241	80	227



# INJURY PREVENTION

## Injury Prevention during Physical Training:

Navy Initial Training experiences a 20% injury rate, which is largely due to personnel arriving in poor physical condition. The goal of the Navy Physical Training Program is to provide you with guidelines for exercise so that you improve but not so much that you cause overuse, excessive overload leading to injury or illness. Overuse problems commonly occur at the beginning of a new exercise program and account for the majority of injuries. The body and muscles must be given time to gradually adapt to the new demands of a physical activity program. The first few months of a new physical conditioning program are the most critical.

## Injury Prevention Overview:

Participation in physical exercise offers many benefits; these benefits far exceed the risk of injury. When you exercise, you intentionally use certain muscles to increase their strength and endurance. It is common to feel minor aches and soreness as your body adapts to these efforts. While injury is possible in any exercise program, following safety guidelines to prevent injuries and participating in a sensible strengthening and stretching program generally decrease risk of injury for those who participate in physical fitness programs. When beginning a physical training program, **IT IS IMPORTANT TO GRADUALLY INCREASE YOUR EXERCISE INTENSITY AND DURATION.** When in doubt about your physical activity program, it is better to cut back and take it easy rather than to do too much too soon.

- The one physical fitness component that stands out in virtually all studies for the prevention of injuries is aerobic fitness. Studies show that being aerobically conditioned prior to entering initial training will greatly decrease your chances of getting injured. The lower the initial level of fitness when beginning training, the greater the risk of experiencing training related injury.
- Though being aerobically conditioned is important for the prevention of injury, aerobic exercises such as running have the potential to cause injury through repetitive, forceful impact against hard surfaces. During your aerobic conditioning efforts, it is recommended to participate in different types of aerobic activities to prevent injury occurrence. Remember to gradually increase your exercise intensity and duration.
- When ligaments, tendons, muscles, and bones are strengthened through muscular exercise, risk of injury is decreased. Strong, flexible muscles and ligaments can better withstand the stress only a few groups of muscles, leaving others weak. For example, running strengthens quadriceps while not developing hamstrings. Flexibility programs may decrease risk of injury. When tight muscles restrict the natural range of motion of a joint, the slightest unusual twist can cause a strain or pull. Inflexibility may also cause overuse injuries because inelastic muscles transfer excessive stress to even less flexible areas of the body.



# AVOIDING COMMON INITIAL TRAINING INJURIES

## Common Injuries during Initial Training:

The five primary injuries most commonly incurred by personnel during Navy initial training schools include the following: ligament sprains, muscle strains, shin splints, stress fractures, and Runner's Knee, also known as Iliotibial Band Friction Syndrome (ITBS). Approximately 20% of individuals participating in initial training will obtain these types of injuries, which could affect their successful completion of initial training. To best prepare you in preventing these injuries from occurring to you during initial training, this section will define each injury, explain the primary causes of each injury, and provide you with injury prevention guidelines, including muscle strengthening and stretching exercises.

### Sprains:

A sprain is a partial or complete tear of a ligament, the tissue that binds bones together to form a joint. A sprain is most often a result of a sudden force, typically a twisting motion that surrounding muscles are not strong enough to control. Both ankles and knees are vulnerable to sprains during initial training. Strong, flexible muscles help protect against sprains. For example, to prevent ankle sprain, strengthen ankles with flexion, extension, inversion, and eversion exercises. Exercise tubing or bicycle tubing is needed during this exercise. Recommended exercise sequence is 3 sets of 10 repetitions/3 times per week.

**Plantar flexion:** Band around forefoot, point toe as far as possible.

**Dorsi-flexion:** Attach band to stationary object opposite of foot. Position band on top of foot and pull foot toward you.

**Inversion:** Attach band to inside of foot and a stationary object opposite it. Pull foot inwards.

**Eversion:** Attach band to inside of foot and a stationary object opposite it. Pull foot outwards.

### Strains:

A muscle strain is a partial or complete tear of muscle fibers or a tendon and is sometimes referred to as a muscle "pull". There are many different causes, but it most often results from a violent contraction of the muscle. A strain may be caused by fatigue, overexertion, muscle imbalance or weakness, or electrolyte or water imbalance. To prevent strains, complete a full-body warm-up before working out, take precautions not to overdo, and work toward balancing the strength and flexibility in opposing muscles.

## **Shin Splints:**

A shin splint refers to any pain in the front of the lower leg (shin). Early signs are acute burning pain or irritation in the lower third front of the leg. This may progress to slight swelling, redness, warmth, and inflammation. Shin splints may come early in an exercise program and are particularly common in those who are out of shape, overweight, or who have anatomical/mechanical problems. Working out on very hard or very soft surfaces can cause shin splints, even if a person is in good physical condition. Switching from hard to a soft surface or vice versa, excessive mileage, improper footwear, poor foot mechanics, running on a road slope, and running the same direction all the time may cause shin splints. To prevent shin splints, you should avoid the identified causes of this injury.

## **Stress Fracture:**

A stress fracture is a very small, microscopic break in a bone caused by overuse. Unlike a broken bone, which occurs with a distinct traumatic event, a stress fracture is the result of cumulative overload that occurs over many days or weeks. Doing too much too soon (overuse) is the major cause. Bone is living tissue that adjusts to exercise force demands placed on it. As force is applied, bone will remodel itself to better handle the force. If too much force is applied, the bone may fracture before it can successfully remodel. Running extreme mileage, doing impact activities such as running, wearing worn-out shoes, exercising on hard surfaces such as asphalt or concrete, and having poor foot mechanics may cause a stress fracture. Because they have smaller, lighter bones, women are more prone to stress fractures than are men. To prevent stress fractures, gradually work into a physical training program, and avoid the identified causes of stress fractures.

## **Iliotibial Band Friction Syndrome:**

Iliotibial Band Friction Syndrome is an overuse condition commonly occurring in runners, in individuals who are out of shape or who do too much physical activity too soon (overuse). Running repetitively along the outside slope found on many paved streets may also cause Runner's Knee. The iliotibial band is located on the outside part of the thigh and connects at the knee. Irritation usually develops at the outside thigh and knee area where friction is created. Stretching the iliotibial band and gradually working into a physical conditioning program will assist you in preventing this overuse injury. Iliotibial band stretch: Cross left foot over right, press hips to left. Repeat with other side.