# TEAM LIFE PROFESSIONAL DEVELOPMENT SEMINAR \#1 

FITNESS TESTS TO DETERMINE YOUR CURRENT FITNESS LEVEL THE COMPONENTS OF EXERCISE<br>DEVELOPING A FITNESS PROGRAM

## Muscular Strength and Endurance

Muscular Strength: the amount of force a muscle can exert with a single maximum effort. Important for smooth easy performance of everyday activities.
Muscular endurance: ability of a muscle to resist fatigue and sustain a given level of tension. Important for good posture and injury prevention.

## Curl-Up test

Start by lying flat on back, knees bent to 90 degrees, arms straight at sides with palms down. Place a 12 inch ruler at the tip of your fingers. Curl up till your fingers reach the end of the ruler. Perform as many curl-ups as you can at a steady pace with correct form.

MY CURL-UP SCORE $\qquad$

| MEN | VERY <br> POOR | POOR | AVG | GOOD | EXCELLENT | SUPERIOR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |  |
| $16-19$ | $<48$ | $48-57$ | $58-64$ | $65-74$ | $75-93$ | $>93$ |
| $20-29$ | $<46$ | $46-54$ | $55-63$ | $64-71$ | $75-93$ | $>93$ |
| $30-39$ | $<40$ | $40-47$ | $48-55$ | $56-64$ | $65-81$ | $>81$ |
| $40-49$ | $<38$ | $38-425$ | $46-53$ | $54-62$ | $63-79$ | $>79$ |
| $50-59$ | $<36$ | $36-43$ | $44-51$ | $52-60$ | $61-77$ | $>77$ |
| $60-69$ | $<33$ | $33-40$ | $41-48$ | $49-57$ | $58-74$ | $>74$ |


| WOMEN | VERY <br> POOR | POOR | AVG | GOOD | EXCELLENT | SUPERIOR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |  |
| $16-19$ | $<42$ | $42-50$ | $51-58$ | $59-67$ | $68-84$ | $>84$ |
| $20-29$ | $<41$ | $41-51$ | $52-57$ | $58-66$ | $67-83$ | $>83$ |
| $30-39$ | $<38$ | $38-47$ | $48-56$ | $57-66$ | $67-85$ | $>85$ |
| $40-49$ | $<36$ | $36-45$ | $46-54$ | $55-64$ | $65-83$ | $>83$ |
| $50-59$ | $<34$ | $34-43$ | $44-52$ | $53-62$ | $63-81$ | $>81$ |
| $60-69$ | $<31$ | $31-40$ | $41-49$ | $50-59$ | $60-78$ | $>78$ |

## Push-Up Test

Women: Modified Push-ups with body supported by knees and hands. Men: regular push-up with body supported by hands and feet. Body must remain flat and lower body to about a fist off the floor. Perform as many as you can without losing form or stopping.

MY PUSH-UP SCORE $\qquad$

| MEN | VERY <br> POOR | POOR | AVG | GOOD | EXCELLENT | SUPERIOR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |  |
| $18-29$ | $<22$ | $22-28$ | $29-36$ | $37-46$ | $47-61$ | $>61$ |
| $30-39$ | $<17$ | $17-23$ | $24-29$ | $30-38$ | $39-51$ | $>51$ |
| $40-49$ | $<11$ | $11-17$ | $18-23$ | $24-29$ | $30-39$ | $>39$ |
| $50-59$ | $<9$ | $9-12$ | $13-18$ | $19-24$ | $25-38$ | $>38$ |
| $>60$ | $<6$ | $6-9$ | $10-17$ | $18-22$ | $23-27$ | $>27$ |


| WOMEN | VERY <br> POOR | POOR | AVG | GOOD | EXCELLENT | SUPERIOR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |  |
| $18-29$ | $<17$ | $17-22$ | $23-29$ | $30-35$ | $36-44$ | $>44$ |
| $30-39$ | $<11$ | $11-18$ | $19-23$ | $24-30$ | $31-38$ | $>38$ |
| $40-49$ | $<6$ | $6-12$ | $13-17$ | $18-23$ | $24-32$ | $>32$ |
| $50-59$ | $<6$ | $6-11$ | $12-16$ | $17-20$ | $21-27$ | $>27$ |
| $>60$ | $<2$ | $2-4$ | $5-11$ | $12-14$ | $15-19$ | $>19$ |

Flexibility
Flexibility: The ability to move the joints through their full range of motion. With decreased flexibility often comes pain and inability to perform some activities of daily living.

## Sit-and-Reach Test

Sit with legs fully extended and feet flat against a step. Reach as far as you can without bouncing. Hold the stretch for 2 seconds. Reaching to your toes is equal to a score of 26 cm . Those going beyond their toes will have a score over 26 cm , those who cannot touch their toes will have a score under 26 cm .

MY SIT-AND-REACH SCORE $\qquad$

| MEN | NEEDS <br> IMPROVEMENT | FAIR | GOOD | VERY GOOD | EXCELLENT |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |
| $15-19$ | $<24$ | $24-28$ | $29-33$ | $34-38$ | $>38$ |
| $20-19$ | $<25$ | $25-29$ | $30-33$ | $34-39$ | $>39$ |
| $30-39$ | $<23$ | $23-27$ | $28-32$ | $33-37$ | $>37$ |
| $40-49$ | $<18$ | $18-23$ | $24-28$ | $29-34$ | $>34$ |
| $50-59$ | $<16$ | $16-23$ | $24-27$ | $28-34$ | $>34$ |
| $60-69$ | $<15$ | $15-19$ | $20-24$ | $25-32$ | $>32$ |


| WOMEN | NEEDS <br> IMPROVEMENT | FAIR | GOOD | VERY GOOD | EXCELLENT |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |
| $15-19$ | $<29$ | $29-34$ | $34-37$ | $38-42$ | $>42$ |
| $20-29$ | $<28$ | $28-32$ | $33-36$ | $37-40$ | $>40$ |
| $30-39$ | $<27$ | $27-31$ | $32-35$ | $36-40$ | $>40$ |
| $40-49$ | $<25$ | $25-29$ | $30-33$ | $34-37$ | $>37$ |
| $50-59$ | $<25$ | $25-29$ | $30-32$ | $33-38$ | $>38$ |
| $60-69$ | $<23$ | $23-36$ | $27-30$ | $31-34$ | $>34$ |

## Cardiorespiratory Endurance

Cardiovascualr Endurance: the ability to perform prolonged, large-muscle, dynamic exercise at moderate-to-high levels of intensity. At a low level of cardiorespiratory endurance the heart must work hard during low intensity everyday activities.

## YMCA STEP TEST

Use a 12inch bench, step at a constant stepping rate of 24 step-ups per minute, for 3 minutes. After 3 minutes, sit down on bench and locate carotid pulse. Take pulse for 1 minute.

MY 1 MINUTE PULSE COUNT $\qquad$

| MEN | Very Poor | poor | Below avg | Avg | Above avg | Good | Excellent |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |  |  |
| $18-25$ | $131-164$ | $118-128$ | $107-114$ | $101-104$ | $91-97$ | $82-88$ | $70-78$ |
| $26-35$ | $130-164$ | $119-126$ | $109-116$ | $101-106$ | $91-97$ | $83-88$ | $73-79$ |
| $36-45$ | $132-168$ | $120-128$ | $113-118$ | $105-111$ | $98-102$ | $86-94$ | $72-81$ |
| $46-55$ | $135-158$ | $124-130$ | $118-121$ | $109-115$ | $98-103$ | $89-96$ | $78-84$ |
| $56-65$ | $131-150$ | $122-128$ | $113-118$ | $105-111$ | $98-101$ | $89-97$ | $72-82$ |
| $>65$ | $133-152$ | $122-126$ | $114-119$ | $104-113$ | $97-102$ | $89-95$ | $72-86$ |


| WOMEN | Very Poor | poor | Below avg | Avg | Above avg | Good | Excellent |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |  |  |
| $18-25$ | $142-155$ | $125-137$ | $118-124$ | $110-116$ | $100-106$ | $88-97$ | $72-83$ |
| $26-35$ | $141-154$ | $129-135$ | $121-127$ | $112-118$ | $103-110$ | $91-97$ | $72-88$ |
| $36-45$ | $143-152$ | $130-136$ | $120-127$ | $111-117$ | $104-109$ | $93-101$ | $74-87$ |
| $46-55$ | $138-152$ | $127-133$ | $121-126$ | $117-120$ | $106-111$ | $96-102$ | $76-83$ |
| $56-65$ | $142-151$ | $129-136$ | $119-127$ | $113-117$ | $106-111$ | $97-103$ | $74-92$ |
| $>65$ | $136-151$ | $129-134$ | $123-127$ | $117-121$ | $104-114$ | $93-100$ | $73-86$ |

## Body Composition

The proportion of Fat-Free mass (muscles, bone, water, organs, tissues) to Fat mass. Healthy body composition involves a low level of body fat.

MY BODY FAT \% $\qquad$

| MEN | OBESE | OVERFAT | RECOMMENDED | LOW/ATHLETIC | ESSENTIAL |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |
| $20-39$ | $>25$ | $20-24$ | $8-19$ | $6-7$ | $3-5$ |
| $40-59$ | $>28$ | $22-27$ | $11-21$ | $6-10$ | $3-5$ |
| $60-79$ | $>30$ | $25-29$ | $13-24$ | $6-12$ | $3-5$ |


| WOMEN | OBESE | OVERFAT | RECOMMENDED | LOW/ATHLETIC | ESSENTIAL |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AGE |  |  |  |  |  |
| $20-39$ | $>39$ | $33-38$ | $21-32$ | $13-20$ | $8-12$ |
| $40-59$ | $>40$ | $34-39$ | $23-33$ | $13-22$ | $8-12$ |
| $60-79$ | $>42$ | $36-41$ | $24-35$ | $13-23$ | $8-12$ |

## Setting up an Exercise Program

The FITT Principle

|  | Cardiorespiratory Endurance | Muscular Strength and Endurance | Flexibility |
| :---: | :---: | :---: | :---: |
| F <br> Frequency | 3-5 days/week | 2-3 non-consecutive days/week | 2-3 days/week |
| $\begin{aligned} & \text { I } \\ & \text { Intensity } \end{aligned}$ | 55/65-90\% of Maximum Heart Rate | Sufficient Resistance to fatigue your musclesThe last repetition should be hard! | Stretch to the point of tension. Reach and hold the stretch, do not bounce while stretching |
| T <br> Time | 20-60 Minutes. <br> If you choose to workout at the low end of the heart rate range then you will need to workout for a longer period of time | For general fitness: 8-12 repetitions and 1-2 sets. | 2-4 repetitions of each stretching exercise. Hold each stretch for 15-30 seconds. |
| $\begin{aligned} & \mathrm{T} \\ & \text { Tyре } \end{aligned}$ | Aerobic activities involving rhythmic continuous activities involving the large muscle groups. Choose an activity you enjoy doing. Examples: walking, running, bicycling, swimming... | Choose exercises that involve resistance against the muscles. Include resistance exercises for every major muscle group! Should be a minimum of 8-10 exercises. | Incorporate stretching exercises for all muscle groups. Stretch after warm-up or after workout! |

## Finding your Target Heart rate

20 year old
HRmax $=220-20=20065 \%$ of $200=130 \mathrm{bpm}, 90 \%$ of $200=180 \mathrm{bpm}$
40 year old
HRmax $=220-40=18065 \%$ of $180=117 \mathrm{bpm}, 90 \%$ of $180=162 \mathrm{bpm}$


