



# ASC Fitness Leader Training

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# Class Overview

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## ■ Purpose

- Educate and train AD members to become unit FL's (fitness leaders) in support of ASC/CC request. Start up date Oct 6, 2003.
- Familiarize FL's with the testing aspects of the new AF fitness program "Fit to Fight" to begin in January 2004

## ■ Goals

- Encourage lifelong exercise and healthy lifestyle habits in our military enhance overall fitness and readiness.

## ■ Objectives

- Determine efficacy of training by tracking changes in AF fitness test scores
- Provide follow-up training opportunities to FL's through classes and e mail



# FL training curriculum

## ■ Day 1: Classroom Training

- **Sec 1:** Intro and review of the new USAF and WPAFB fitness programs
- **Sec 2:** Components of Fitness
- **Sec 3:** Running, Aerobic Exercise and Safety Guidelines/Recommendations
- **Sec 4:** Strength Training, Gym Equipment Use and Indoor training ideas
- **Sec 5:** Stretching and Agility and Balance and Outdoor training ideas
- **Sec 6:** Fueling the Fighter (Nutrition)
- **Sec 7:** Changing behaviors
- **Sec 8:** WPAFB gym availability and scheduling your unit workouts
- **Sec 9:** Overview/ requirements for next day's training

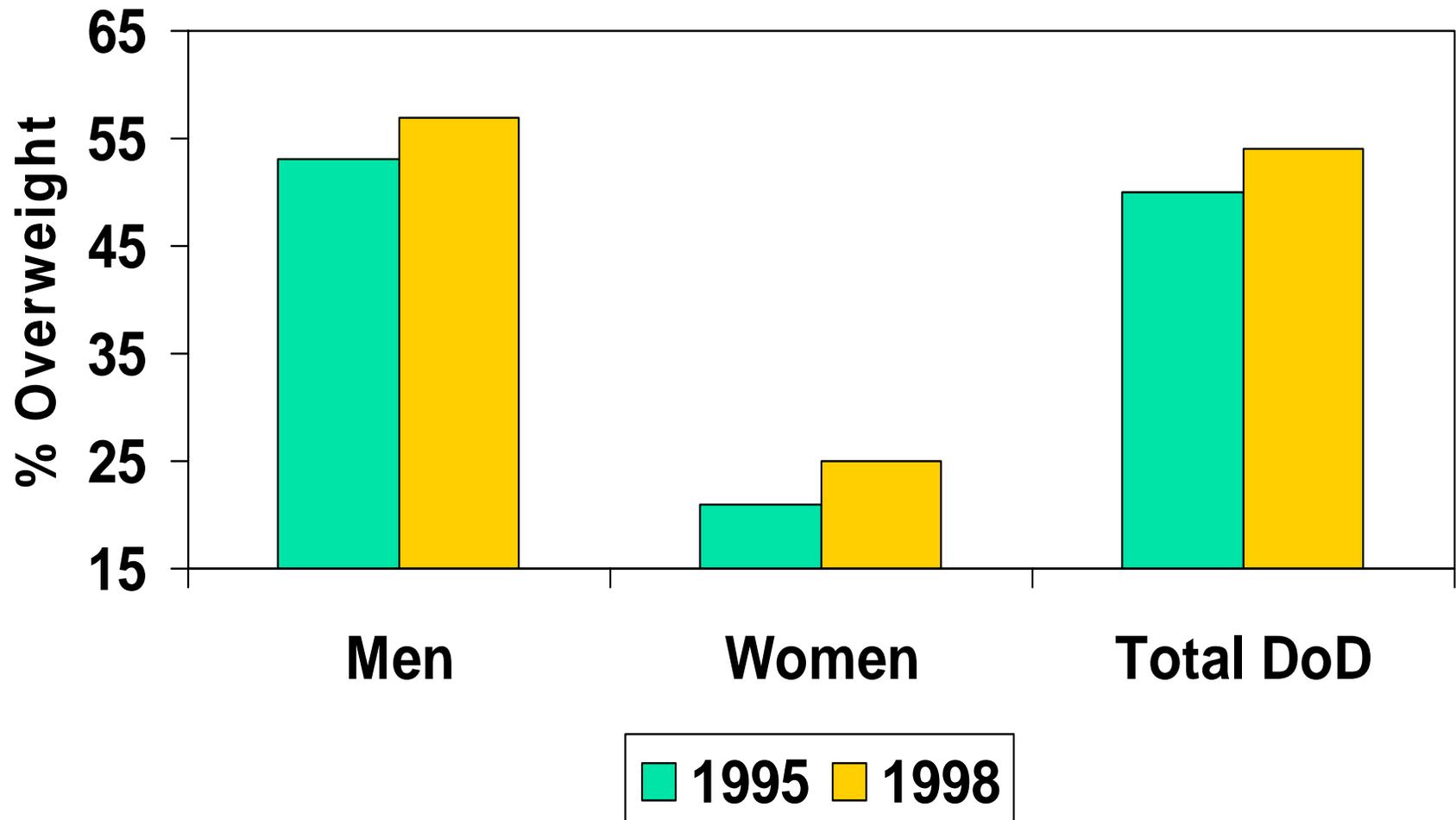
## ■ Day 2: Practical Training

- Resistance training equipment
- Aerobic equipment training
- Spinning instruction
- Aerobic Room Boot Camp
- Indoor Track workouts
- Stability ball training
- *Walk/run drill instruction*
- *Boot camp workouts*
- *Aerobic connectors and Conditioning Stations*
- *Development of unit training programs – part of each practical training session*

*(outside demo/classes – come dressed day two in old gym clothes and be ready to work out)*

# Trends in Overweight (BMI<sub>≥</sub>25) Among U.S. Military Personnel

Lindquist CH, Bray RM. *Prev Med* 2001;32:57-65.





# Medical Risks of Excess Weight

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- High blood pressure
- High cholesterol
- Type 2 diabetes
- Heart disease
- Stroke
- Gallbladder disease
- Arthritis
- Sleep apnea
- Cancers
  - Endometrium
  - Prostate
  - Breast
  - Colon
- Social stigmatization
- Discrimination
- Lowered self-esteem



**“Obesity is the dark side of a technically advanced society.”**

**-Samuel Klein, President**

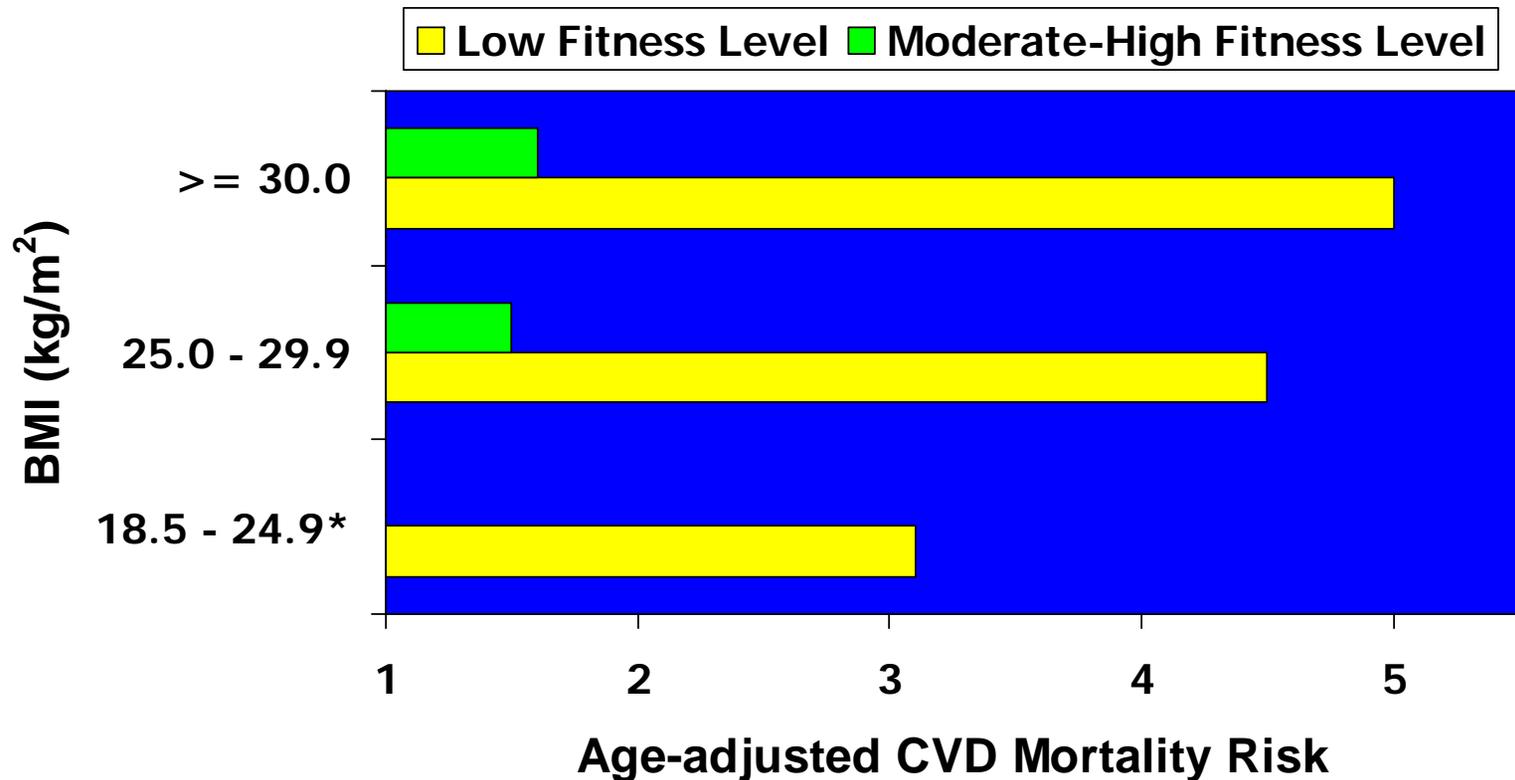
***North American  
Association for the  
Study of Obesity***

**USA Today, 8 Oct 02**



# Obesity, Fitness Level, and CVD Mortality

Lee, Blair and Jackson Am J Clin Nutri. 1999;69:373-380



\*Unfit, lean men had **2.2 times** the risk for all-cause mortality as fit, obese men

\*All cause mortality rate of fit, obese men **was not** significantly different from fit, lean men



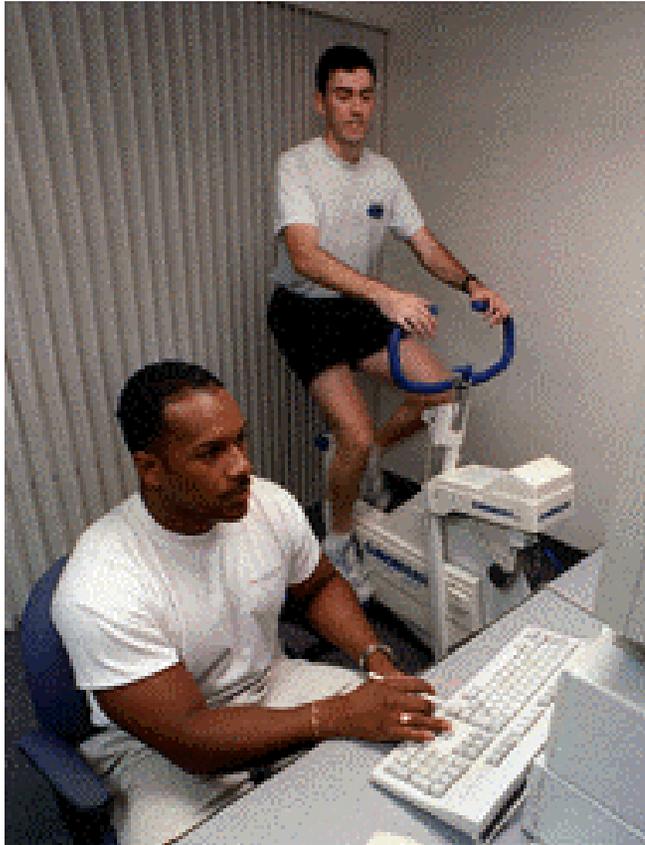
# Proposed Testing Procedures

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## ■ **Coming in Jan 04**

- All low risk AD will run (1 ½ miles)
  - May allow small group runs with oversight by FAMS and FPM
  - May allow inside or outside runs – environmental issues still in works
- **Ergo still used for others at high risk**
- **Single Waist Measurement** (same in men and women) to Replace the present 2 (male) or 3 site (female) Circumferential Body Composition Tests
- **Muscular Fitness Tests**
  - Change to one minute tests (instead of two)
  - May allow small group testing with oversight by FAM

# Proposed Fitness Test Battery



- **Four fitness test components:**
  - 1 ½ mile run (low risk) or Cycle ergometry (50%)
  - Taped waist measure (30%)
  - Pushups (10%)
  - Crunches (10%)
- **Composite score based on total of four components**
  - 0-100 point scale



# Test Stratification

- **Tiered health risk/fitness categorization facilitates tailored program:**
  - **High Fitness (75-100)**
    - Exercise 3 times/wk, retest in one yr
    - **Blue** subcategory (>90)
  - **Marginal Fitness (70-74)**
    - Exercise 3 times/wk, retest in 6 mos
    - Education on poorly scored component(s)
  - **Low Fitness (0-69)**
    - Monitored exercise 4-5 times/wk, retest in 3 mos
    - Individual/group education in exercise/diet/life skills
    - Commander adverse administrative actions should be considered for those members at red levels for prolonged periods

**“DRAFT”**

**SAMPLE SCORING FOR MALE 40-45 YEARS OLD**

VO <sub>2</sub> (ml/kg/min)	Component Score	1 1/2 mile	waist (in)	Component Score	Crunch Reps	Component Score	Push-up Reps	Component Score
>50	50.0	<10:24	<30.5	*****	>47	10.00	>40	10.00
50	50.0	10:24	30.5	30.0	45	9.50	39	9.75
48	45.0	10:54	31.0	29.3	43	9.00	38	9.50
46	4.1	11:06	31.5	28.5	42	8.99	37	9.25
45	43.3	11:36	32.0	27.8	40	8.72	36	9.00
43	41.6	12:12	32.5	27.0	38	8.45	35	8.99
42	40.8	12:30	33.0	26.1	36	8.18	32	8.67
40	39.2	13:12	33.5	25.2	34	7.91	30	8.46
38	37.5	14:00	34.0	24.3	33	7.77	26	8.03
37	37.5	14:24	34.5	23.4	32	7.64	22	7.61
35	36.8	15:18	35.0	22.5	31	7.50	21	7.50
33	36.1	16:24	35.5	22.4	30	7.49	20	7.49
31	35.4	17:36	36.0	22.2	28	7.37	18	7.39
30	35.0	18:12	36.5	22.1	26	7.25	16	7.29
29	35.0	18:54	37.0	21.9	25	7.18	14	7.20
27	28.0	20:36	37.5	21.8	24	7.12	12	7.10
25	21.0	22:30	38.0	21.6	22	7.00	10	7.00
24	17.5	23:36	38.5	21.5	21	6.99	9	6.99
22	10.5	26:06	39.0	21.3	20	5.59	6	4.66
20	3.5	29:18	39.5	21.2	19	4.19	4	3.11
<20	0.0	>29:18	40.0	21.0	18	2.80	3	2.33
			40.5	18.0	17	1.14	1	0.78
			41.0	15.0	<17	0.00	<1	0.00
			41.5	12.0				
			42.0	9.0				
			42.5	6.0				
			43.0	3.0				
			43.5	0.0				



# Results in Spacecom

- AFSPC Initial Program Test Results: N = 6,185

Risk	Blue	Green	Yellow	Red
Total %	6.76%	61.05%	12.93%	19.26%
WBFMP %	0	27.06%	18.81%	54.13%
MFIP %	0	8.00%	17.33%	74.67%

## Retest Results:

**13.4% Improvement in Composite Score, 42% reduction in High Risk individuals**



# Benefits of New AF Fitness Program

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- Potentially reduce costs associated with obesity
  - Medical care \$\$\$
  - Lost duty days - \$\$\$ and time
- Potential decrease in WBFMP discharge costs
  - Training investment
  - Severance pays
- ↑ Military image
- ↑ Esprit de corps
- ↑ Individual job satisfaction and retention



# ASC Mandatory training

- **Three unit workouts per week-required (1 hour) (4 days per week for “Red” Zone members\*)**
- **Member participation must be tracked** (requires sign in/out sheet)
- **Exercises must be performed on base**, not for example at local YMCA
- **FL’s lead one weekly outdoor workout\*** - choosing either run or hill training options plus calisthenics or outside boot camp style/circuit routines. Several FL’s should join forces in this workout – schedule time for this workout through Captain Catherine Derenzo
- **Twice weekly unit members perform “self selected training with FL guidance or oversight”** (I.e., FL break unit into small groups and participate in one of several FL class training programs presented in this course or ones you develop on your own. Choices could include using indoor track, basketball, soccer, spinning\*, boot camp/circuit in aerobics room\*, or other services fitness classes, sporting events available etc.)
- **Program performed on duty time if mission allowable** – red zone members receive only 3 hours of duty time exercise – the remaining workout done on their own time.
- \* **In the event of serious inclement weather, outside programs will be moved to inside Gym Floor (AF fitness program take precedence I.e. basketball/volleyball players or other programs must vacate during this time – therefore can’t double book gyms) . In addition, use of aerobics room and spinning rooms on “self selected days” must be scheduled through Services Gym Staff.**



# Program options for FL's

## Required Outdoor Training Program Options Include:

- **Various Run/Walk Programs with added calisthenics**
  - Use continuous, interval, staggered start/staggered distance, grouped Indian runs or run training games etc combined with strength related calisthenics
- **Hill training- aerobic and anaerobic fitness connectors**
  - Use a hilly course to maximize aerobic benefit and intersperse with calisthenics
- **Boot Camp Style Workouts**
  - Instructor leads whole unit/class in simultaneous exercise
  - **Aerobic endurance/Agility circuit (no equipment needed)**
  - Use whole body movements (carioca, side step, backward runs, balance drills, strength exercises etc) in a non stop fashion to develop whole body fitness
  - **Aerobic connector/Strength Station course**
  - Jog/side step, lunge etc between different predetermined fixed strength exercise stations
  - **Partner/Sand bag/medicine ball/elastic band circuit training plus Running**
  - Add variety and benefits to workouts using added resistance (funding for equipment still on hold)



# Outdoor training Support "*Wish*" list

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## Supplies:

- **Storage shed/trailer** placed in grassy area located across from refurbished airplane hanger in Area B and near track near Jarvis Gym (to help increase effectiveness and variety of workout routines)
- Containing, resistance bands for varying fit levels, sandbags, jump ropes, agility drill equipment, medicine balls, body bars, weighted vests etc
- First aid kit



# Indoor training

## FL led “Self Selected” Indoor Training Program Options:

- Spinning accompanied with push-up / crunch training or other strength options
- FL led step or other aerobic Classes in aerobics room (WFFC only)
- Indoor track workouts combined with strength/Calisthenics (WFFC)
- Course provided Cardio Equipment and Resistance Workouts or member self selected routines (must meet requirements for cardio and strength)
- Self Selected Basketball or Volleyball Games or other sports or runs
- ***Remember main gym floor is reserved for those mass unit days outside in case of rain. If using the floor for basketball or your own class you must vacate the floor for those that have it reserved if the large units must move inside.***



# Training locations

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## Outside training areas could include:

soccer fields area B

elevated runway

Track and infield near Jarvis gym

grassy area in front of museum and repair bldg.

skeel avenue bike path and grassy areas by long parking lot near tennis courts in area A/C

## Inside Training Areas

- **Wright Field Fitness Center and Jarvis Gym**
- **Medical Center**- work to convert basement open areas into workout facility and take advantage of present workout room in basement for those with extremely tight non-flexible schedules but push everyone else towards other locations. Remember everyone at the hospital is not in the former group.



## An Example of a Typical Unit Training Day

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- FL's lead 5 to 8 minute warm-up and stretching routine.
- Unit brisk walk/jogs over to training course (soccer fields, grassy areas, track infield or hill).
- Unit completes a 30 minute workout from training option list.
- Unit performs a 5 to 8 minute cool-down and stretches.
- FL provides brief about when and where unit will train the following day and when the next unit workout is scheduled.
- Unit jogs or walks back to fitness facility to shower and go to work.
- Total training time range = 45 to 50 min.
- On running only days should consist of 2 to 3 mile runs in either continuous or interval methods plus push-up and crunches as a minimum).



# Training schedule – all workouts

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- Member sign in, FL's lead/encourage 5 to 8 minute warm-up and stretching routine. Warm-up consist of low level activity to increase core temperature.
- FL's then lead/direct the required once weekly outside run or boot camp workout, or on self selected days lead outside or inside program options or allow members to self select exercise activity from gym programs or course offerings. Members must complete 40 additional minutes total
  - To includes sports, running, or gym exercise equipment use plus a minimum added push-ups and crunches (unless addressed in the program itself I.e. strength training routine)
- Members cool down and stretch on their own and sign out with FL log
- FL provides brief about when and where unit will train the following day.



# \*Services training times

## ■ WFFC

- Proposed a.m. training times:

  - 0515-0600 = 200 airmen

  - 0615-0700 = 200 airmen

  - 0715-0800 = 200 airmen

  - 0815-0915 = 200 airmen

- Proposed p.m. training times:

  - 1300-1345 = 200 airmen

  - 1400-1445 = 200 airmen

  - 1500-1545 = 200 airmen

- No more than 200 airmen on gym floor at any time.

- Totals WFFC & JG in am (1300 trained)

- WFFC + JG in pm (900 trained)

## ■ Jarvis Gym

- Same proposed training times as WFFC

- Exception, 100 airmen per train time

- 1 vs. 2 basketball courts

- 600 trained in am

- 300 trained in pm

- No more than 100 on basketball floor at one time



**Contact Captain Catherine Derenzo for once a week large unit times and then Services for any specific rooms (i.e. aerobics or spinning rooms)**



## Try to Find Carrots - Unit incentive/motivation ideas

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▪ **A fitness Coin will be awarded in January for those who score well (probably 90 or above) – but we need to do more. *Try To:***

▪ Post attendance (percentage) in unit's office (to track compliance)

▪ Post changes in overall unit blue/green/yellow and red numbers (to monitor progress)

▪ ***Encourage your commanders to get on the fitness band wagon – maybe they could grant military leave (for a fitness job well done)***

Or develop own unit awards (t shirt, gift certificates to BX or officer's club) based on absolute test score (similar to present top ten program) or for showing the greatest improvement (based on percent improvement in score).

▪ **Invite Exercise Professionals from the HAWC or Services to lead group the group once every quarter**



# Summary

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- **You - the FL's - and your commanders** will make or break this program
  - **Make it work and give it teeth**, you must track member unit and individual attendance, participation and progress and report to superiors
  - **You need to plan ahead** – be ready for your class and people
  - **You need to maintain contact with Services and HAWC** - to update your training programs, add variety and see what other programs you can use with your members (i.e.. Indoor triathlons, blue streak race series, push-up/sit-up competitions, 5K runs, even marathon relay teams!)
  - **You need to ensure commanders are involved and participate** – it is not just an enlisted program

# EXERCISE – One of the World's Best Medicines



## HEALTH BENEFITS OF EXERCISE

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- *ENHANCE YOUR WELL-BEING*
- STRENGTHEN YOUR HEART AND REDUCE CHD
- *HELP WITH WEIGHT LOSS*
- STRENGTHEN MUSCLES AND BONES
- *IMPROVED CONCENTRATION AND AIDS SLEEP*
- REDUCED STRESS, ANXIETY
- *INCREASE RANGE OF MOTION*
- IMPROVE GLUCOSE TOLERANCE AND INSULIN SENSITIVITY
- *REDUCED BLOOD PRESSURE*
- IMPROVED LIPID PROFILE (REDUCED LDL AND INCREASED HDL)
- *INCREASED AEROBIC CAPACITY*
- REDUCED INCIDENCE OF FALLS
- *INCREASED METABOLIC RATE*
- IMPROVED KINESTHETIC SENSE
- *REDUCED RISK OF CANCER\**

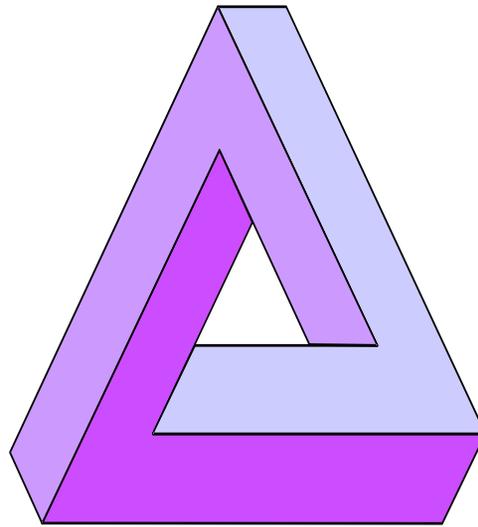


# Exercise - a fine balance

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Adaptation - Improved Physical Performance

Stress



Recovery