BE WELL

Balanced Eating - Workout Effectively - Live Long

Running Module

Why running is a great cardiovascular exercise

- Improves cardiovascular system
- Improves health
- Needs no special equipment
- Helps you prepare for the AF Fitness Assessment
- Easy to do

Running is "something you can do by yourself, and under your own power. You can go in any direction, fast or slow as you want, fighting the wind if you feel like it, seeking out new sights just on the strength of your feet and the courage of your lungs." -- Jesse Owens, Olympic Gold Medalist

Proper Running Form

- Running form is individualized
- Stand upright and tall
- Body should feel relaxed and natural
- Head looking straight forward
- Arms in close to sides of body
- Avoid extraneous arm movements
- Maintain a straight line from your nose through your chest, belly button and inseam

Running Shoes and Apparel

"In running, it doesn't matter whether you come in first, in the middle of the pack, or last, you can say, "I have finished." There is a lot of satisfaction in that."
-- Fred Lebow, NYC Marathon Co-founder

The Right Shoe for the Right Activity

- Wear running shoes when running, not shoes for other sports/activities
  - Running shoes provide the cushion and stability needed for running
- Buy running shoes later in the day due to foot swelling
- Wear the socks and/or orthotics you will be running in to ensure proper fit
- Ensure thumb width difference between toes and end of shoe
- Replace worn shoes

Shoe Shopping Mistakes

- Buying for looks
- Buying shoes that are too small
- Assuming your size
- Thinking any running shoe will work for any foot type
- Assuming the most expensive shoe is the best

The Perfect Running Shoe

- Your running shoes should:
  - ➢Feel good on your feet
  - ➢Not cause blisters
  - ➢Not blacken your toenails

- Pick running shoes based on foot type

Some pronation is a good thing!

- Arch collapses inward to act as a shock absorber
- Common foot types:
  - Flat feet
  - Normal feet
  - High arch feet

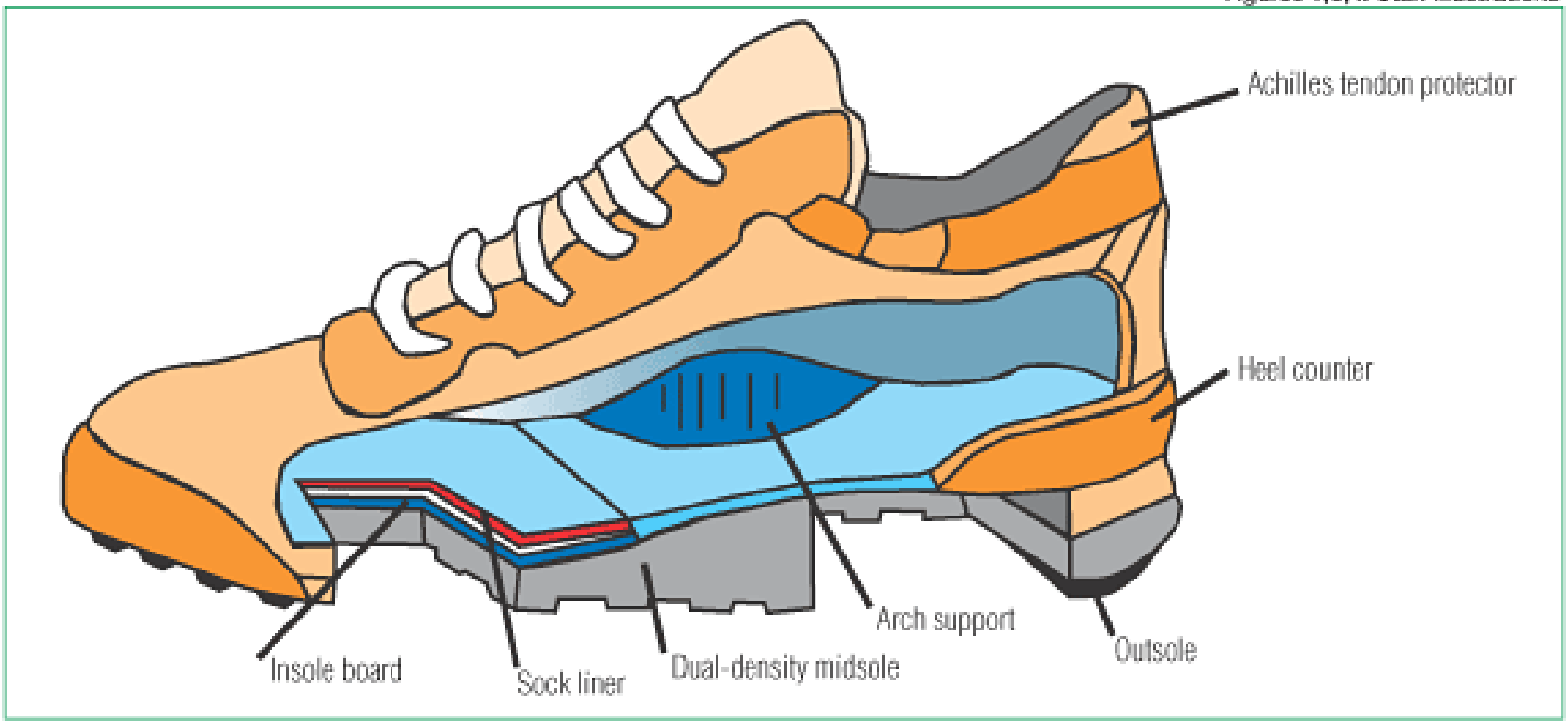
Types of Running Shoes

- Cushioning
  - Moderate – high arch
  - Maximum cushion
  - Little arch support
- Stability
  - Normal Arch
  - Mild to moderate pronation
  - Some support and cushioning
- Motion Control
  - Flat Feet
  - Overpronation
  - Most support/stability

Worn shoe tilt

Anatomy of a Running Shoe

Figures 1,3,4: Staff Illustrations



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When to replace my shoes

- Midsole lasts 400-600 miles or 6-12 months
- Running shoes lose 30-50% shock absorption after 250 miles
- When it is 80% worn

"To give anything less than your best is to sacrifice the gift."
– Steve Prefontaine, Long-distance Runner

Barefoot/Minimalist Shoes

- Running without any shoes on the feet
  - ➢Some argue that barefoot running is healthier for your feet, but research is not conclusive or widely accepted by the medical community
  - ➢Suitably padded running shoes are recommended, with particular consideration of foot type

"The miracle isn't that I finished (the race). The miracle is that I had the courage to start."
– John Bingham, Marathoner and Author

Running Apparel

- Synthetic socks for moisture protection
- Reflective clothing so vehicles see you
- Sunglasses that block UV rays

- Clothes with moisture wicking when warm (e.g., “Drifit”, “Coolmax”, “Drylyte”)
- Clothes in layers, with high insulating properties that aren’t diminished by getting wet
- Wear cap and gloves when cold

Types of Running Surfaces

- Concrete
- Asphalt
- Cinder trails
- Grass

"Jogging is very beneficial. It's good for your legs and your feet. It's also good for the ground. It makes it feel needed." -- Charles Schulz, Peanuts Cartoonist

Running Surfaces Pros/Cons

Surface	Advantages	Disadvantages
Concrete	Level surface causes less trauma	Hardest surface, unforgiving
Cinder trails	More shock absorption	Often crowned and causes awkward gait
Asphalt	Fairly flat, some shock absorption	More variable surface causes higher incidence of traumatic injuries
Grass	Softest of outdoor surfaces	Highest incidence of traumatic injuries

Getting Started

- How do I get started?
  - ➢Progression
  - ➢Training principles
  - ➢Safety

Progression

- Change only one variable at a time to help avoid injury and burnout. For example:

  Increase distance <u>OR</u> intensity <u>OR</u> speed
- Speed = Stride rate x stride length
- Better performers have a slightly shorter stride length and greater stride frequency
- 10% Rule = never add more than 10% to existing distance each week

"Being a runner means you are free two win and lose and live life to its fullest."
– Bill Rodgers, Marathoner

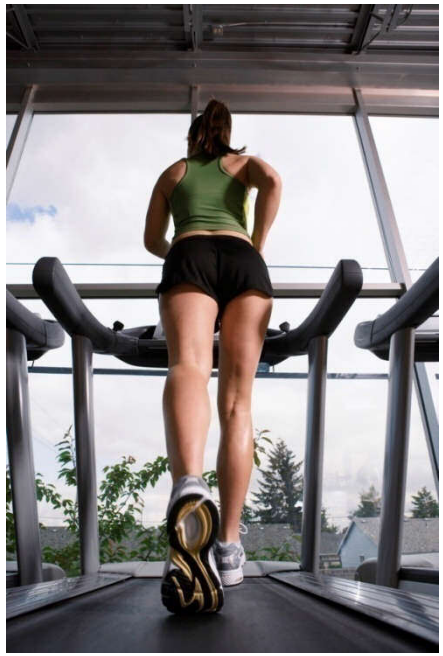
Common Running Mistakes

- Starting too fast
- Little or no warm-up and/or cool-down
- Dehydration
- Eating too little or too much beforehand

"I ran and ran and ran every day, and I acquired this sense of determination, this sense of spirit that I would never, never give up, no matter what happened."
– Wilma Rudolph, Olympic Gold Medalist

Training Principles

1. Individual differences
   - One size does **NOT** fit all
2. Specificity
   - RUN to improve your RUN time
3. Regularity
   - “Use it or lose it”



Training Principles

4. Overload
   - Increase stresses on body to improve

5. Progression
   - Gradually increase frequency, intensity, and time to decrease risk of injury
6. Adaptation
   - Train your body to adjust to new demands

Safety Tips

- Stay alert! Be aware of your surroundings
  - Watch for traffic and other obstacles
- Run against traffic to see on-coming vehicles
- Don't wear headsets if running near traffic
- Wear reflective material before dawn/after dusk
- Run with a partner

Hydration

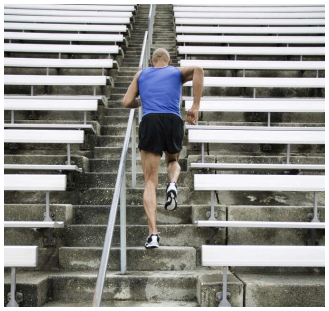
- Before: drink 2 cups of water 15-20 min prior to running
- During: drink, as needed, based on duration of exercise and temperature
- After: drink 16 oz of fluid per pound of body weight lost during exercise

- *For exercise sessions of less than 60 minutes, cool water should be the beverage of choice*

Additional Tips for Injury Prevention

- Include cross training (different kinds of physical activities, not just running)
- Schedule rest days into your training schedule
- Properly warm-up and cool-down
- Participate in a strength training program

Warm-Up



- Increases muscle temperature
- Prepares body for upcoming workout
- Dilates blood vessels which decreases stress on the heart
- Helps muscles contract and relax more quickly which allows for faster and stronger movements
- Reduces risk of injury

Components of Warm-Up:
5-10 minutes walk/jog

Cool-Down

- Helps displace lactic acid build-up
- Prevents blood pooling which increases swelling
- Allows for heart rate and lung recovery
- Reduces risk of injury

Components of Cool-Down:

5-10 minutes walk/jog

Static Stretch: Hold 20-30 seconds and repeat

Endurance vs. Speed

- Focus on endurance first
- Be able to walk/jog 3 miles
  - ➢Then progress to jog/run 3 miles
- Then work on increasing speed

"If you run, you are a runner. It doesn't matter how fast or how far. There is no test to pass, no license to earn, no membership card to get. You just run."
-- John Bingham, Marathoner and Author

Training Types

- **Distance** - long with a slow pace
- **Interval** - high intensity for 3-5 minutes with equal rest periods (400-800 m)
- **Fartlek** - varied with slow and fast pace (alternating between run, jog, walk)
- **Tempo** - continuous run with an easy beginning, a buildup in the middle to fast pace, then ease back to finish

Sample Speed Workouts

INTERVALS

- 5-10 min warm-up
- Workout
  - 400 m hard
  - 400 m recovery
  - Repeat 2-6 times
- 5-10 min cool-down

TEMPO

- 5-10 min warm-up
- Workout
  - Distance (1.5 mi)
  - Time (10 min)
- 5-10 min cool-down

4 x 400* = ~2 miles of work

* 1 lap (400m) at fast pace followed by 1 lap recovery x 4

Types of Running Workouts

	Endurance	Speed	Practice Test
Goal	Build your base	Increase leg turn over rate	Baseline
Description	Distance or Time	Short, Fast Bursts (Stride outs)	Simulate your test
Pace	Slower	Fast	Faster than the week before ☺
Example	30 min or longer	Intervals or Tempo	1.5 miles!

Walk to Run Program

Wk	M	T	W	R	F	Sa	Su
1	Run 2 min, Walk 2 Min (repeat for 20 min)		Run 2 min, Walk 2 Min (repeat for 20 min)		Run 2 min, Walk 2 Min (repeat for 20 min)	Cross train	
2	Run 3 min, Walk 2 Min (repeat for 20 min)		Run 3 min, Walk 2 Min (repeat for 20 min)		Run 3 min, Walk 2 Min (repeat for 20 min)	Cross train	
3	Run 5 min, Walk 3 Min (repeat for16 min)		Run 5 min, Walk 3 Min (repeat for 16 min)		Run 5 min, Walk 3 Min (repeat for 16 min)	Cross train	
4	Run 6 min, Walk 3 Min (repeat for18 min)		Run 5 min, Walk 3 Min (repeat for18 min)		Run 5 min, Walk 3 Min (repeat for 18 min)	Cross train	
5	Walk 5 min, Run 8 Min, Walk 5 min		Walk 5 min, Run 8 Min, Walk 5 min		Walk 5 min, Run 8 Min, Walk 5 min	Cross train	

Walk to Run Program

Wk	M	T	W	R	F	Sa	Su
6	Walk 5 min, Run 10 Min, Walk 5 min		Walk 5 min, Run 10 Min, Walk 5 min		Walk 5 min, Run 10 Min, Walk 5 min	Cross train	
7	Walk 5 min, Run 12 Min, Walk 5 min		Walk 5 min, Run 12 Min, Walk 5 min		Walk 5 min, Run 12 Min, Walk 5 min	Cross train	
8	Walk 5 min, Run 15 Min, Walk 5 min		Walk 5 min, Run 15 Min, Walk 5 min		Walk 5 min, Run 15 Min, Walk 5 min	Cross train	
9	Walk 5 min, Run 17 Min, Walk 5 min		Walk 5 min, Run 17 Min, Walk 5 min		Walk 5 min, Run 17 Min, Walk 5 min	Cross train	
10	Walk 5 min, Run 20 Min, Walk 5 min		Walk 5 min, Run 20 Min, Walk 5 min		Walk 5 min, Run 20 Min, Walk 5 min	Cross train	

Sample Beginner 1.5 mile

Wk	M	T	W	R	F	Sa	Su
1	Practice Test	XT 30 min + ST	Rest	2 x 400	XT 30 min + ST	1.5 mi	Rest
2	1.5 mi	XT 30 min +ST	Rest	2 x 400	XT 30 min +ST	1.75 mi	Rest
3	1.5 mi	XT 40 min+ ST	Rest	3 x 400	XT 40 min+ ST	2.0 mi	Rest
4	1.75 mi	XT 40 min +ST	Rest	3 x 400	XT 40 min +ST	Rest	Rest
5	1.75 mi Hard	XT 40 min +ST	Rest	4x 400	XT 40 min +ST	2.0 mi	Rest
6	**Practice Test**	XT 40 min +ST	Rest	4x 400	XT 40 min +ST	2.25 mi	Rest

Training for the 1.5 Mile Run

1) Focus on endurance

- Distance (Long): easy pace
- Hills (for 5k runners)

2) Then, focus on speed

- Intervals: 400-800m hard, followed by recovery
- Tempo Runs: “speed endurance”

3) Don’t forget to practice the test

Getting Started

- Identify needs
- Set goals
- Identify potential barriers

  and how to overcome them
- Develop your training plan
- Keep a running log
- Reward yourself

"If you want to become the best runner you can be, start now. Don't spend the rest of your life wondering if you can do it." – Priscilla Welch, Marathoner

Resources for Runners

Running logs

- http://running-log.com/
- http://www.davidhays.net/running/runlog/runlog.html

Sample running programs

- http://www.therunningadvisor.com/Training.html
- http://www.halhigdon.com

Sports nutrition

- http://fnic.nal.usda.gov/
- http://www.nutrition.gov/

Take Home Messages

- Wear proper equipment
- Build endurance first, then train for speed
- Practice injury prevention techniques
  - Remember the 10% Rule
- Follow training principles
- Practice 1.5 mile run
- Set goals & keep a running log

What's YOUR running plan?