MARATHON TRAINING

FURMAN INSTITUTE OF RUNNING & SCIENTIFIC TRAINING   FIRST

MARATHON HISTORY

- Why the Marathon?
  - Athens Olympics, 1896

- Why 26 miles, 385 yards?
  - London Olympics, 1908

- Why Not Women?
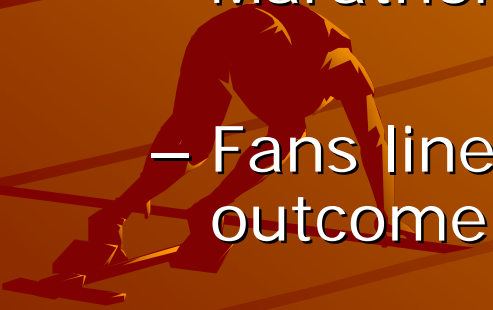 - Los Angeles, 1984

BOSTON MARATHON

- Began in 1897

  - Big sporting news, front page reporting

  - Marathoners were major sports heroes

  - Fans lined the course to bet large sums on the outcome

  - Curious onlookers to watch whether any of the participants would drop dead

Boston Marathon

- Adopted standardized distance in 1924
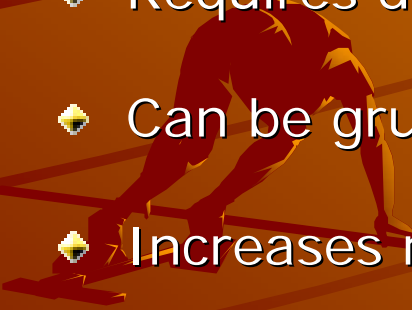
- Began qualifying standards in 1970

- Women in the race
  - Unofficially in 1966
  - Officially in 1972

WHY RUN A MARATHON?

- Lofty goal

- Gives confidence

- Requires much time and effort

- Requires disciplined training

- Can be grueling and unpredictable

- Increases risk of injury

- Makes you a hero!

MARATHON SELECTION

- Well in Advance

- Large or small

- Terrain – course profile

- Environmental Conditions

- Travel

MARATHONING

- Finishers

- Runners

- Racers

MARATHONING TRENDS

- 1976: 25,000 finishers per year

- 1980: 120,000 finishers per year

- 1990: 260,000 finishers per year

- 2000: 451,000 finishers per year

Marathon Demographic Breakdown 1980-2004

	1980	1995	1998	1999	2000	2002	2003
Women	10.5%	26%	34%	36%	38%	40%	40%
Masters	26%	41%	40%	42%	44%	43%	43%

Median Times

	1980	1995	2002	2004
Males	3:32:17	3:54:00	4:20:01	4:31:46
Females	4:03:39	4:15:00	4:56:46	5:06:46

Median Age

	1980	1995	1998	2000	2003	2004
Males	34	38	38	38	39	40.5
Females	31	35	34	35	35	36.1
Overall	na	na	37	37	38	38.8

PREREQUISITES

- Solid Aerobic Fitness Base Before Starting Marathon Training
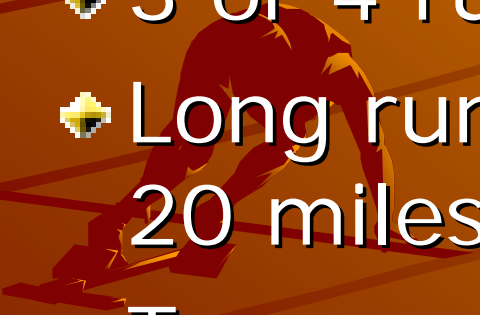 - 3x/week
  - 15 miles/week
  - Long run of 6 miles

- Time and Energy to Train

- Dedication and Determination

TRAINING FOR NOVICES

- 18 Week Program
- From a 15-mile base build to 37 miles per week
- 3 or 4 runs per week
- Long run increases gradually to 18-20 miles
- Two non-consecutive days of rest
- Cross-train two days per week

TRAINING FOR RUNNERS AND RACERS

- Interval training

- Mid-Week Tempo or Goal Marathon Pace (MP) run

- Weekly long run

- Weekly mileage from 35 to 48 miles equivalence

INTERVAL TRAINING

- Warm-up (2 to 3 miles)

- Strides (4-6 x 100)

- Longer intervals
  – 6-8 x 800, 3-4 x 1600, 5 x 1K, 3 x 2000

- 5K to 10K pace

- Cool down (1 to 2 miles)

The Sub-2:40 Marathon (6:06 per mile)
Intervals: miles in 4:50–5:15, ¾ in 3:38–3:57, ½ in 2:22–2:26.
Races: 10K in 34:30, 10 miles in 57:00, half-marathon in 1:15.
The Sub-2:50 Marathon (sub-6:29 per mile)
Intervals: miles in 5:23–5:40, ¾ in 3:56–4:15, ½ in 2:33–2:37.
Races: 10K in 36:30, 10 miles in 1:00:15, half-marathon in 1:20.
The Sub-3:00 Marathon (sub-6:52 per mile)
Intervals: miles in 5:42–6:00, ¾ in 4:10–4:30, ½ in 2:42–2:46.
Races: 10K in 38:40, 10 miles in 1:04, half-marathon in 1:25.
The Sub-3:15 Marathon (7:26 per mile)
Intervals: miles in 6:06–6:25, ¾ in 4:27–4:49, ½ in 2:53–3:12.
Races: 10K in 41:30, 10 miles in 1:09, half-marathon in 1:32:30.
The Sub-3:30 Marathon (8:00 pace per mile)
Intervals: miles in 6:35–6:55, ¾ in 4:48–5:11, ½ in 3:07–3:12.
Races: 10K in 44:45, 10 miles in 1:14, half-marathon in 1:38:15.
The Sub-3:45 Marathon (8:34 pace per mile)
Intervals: miles in 7:03–7:25, ¾ in 5:09–5:34, ½ in 3:20–3:26.
Races: 10K in 47:45, 10 miles in 1:19, half-marathon in 1:46.
The Sub-4:00 Marathon (9:09 pace per mile)
Intervals: miles in 7:27–7:50, ¾ in 5:27–5:53, ½ in 3:32–3:37.
Races: 10K in 51:00, 10 miles in 1:25, half-marathon in 1:53.
The Sub-4:15 Marathon (9:43 pace per mile)
Intervals: miles in 8:05–8:30, ¾ in 5:54–6:23, ½ in 3:50–3:56.
Races: 10K in 55:00, 10 miles in 1:31, half-marathon in 2:00.
The Sub-4:30 Marathon (10:17 pace per mile)
Intervals: miles in 8:28–8:55, ¾ in 6:11–6:42, ½ in 4:01–4:08.
Races: 10K in 57:30, 10 miles in 1:35, half-marathon in 2:06:30.
The Sub-4:45 Marathon (10:52 pace per mile)
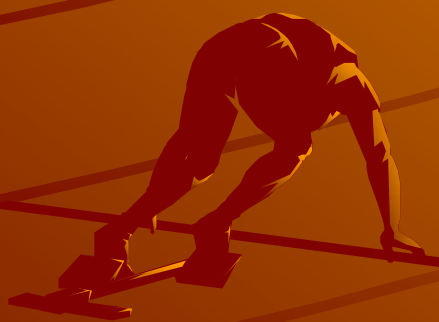Intervals: miles in 8:52–9:20, ¾ in 6:29–7:00, ½ in 4:12–4:19.
Races: 10K in 1:01, 10 miles in 1:41, half-marathon in 2:14.
The Sub-5:00 Marathon (11:26 per mile)
Intervals: miles in 9:21–9:50, ¾ in 6:50–7:23, ½ in 4:26–4:33.
Races: 10K in 1:04, 10 miles in 1:45:30, half-marathon in 2:20.

MID-WEEK TEMPO RUN

- 5-10 mile run

- 10K to marathon pace
  - 3 mile segment at 10K pace
  - 5 to 6 mile run at 10K plus 20 second pace
  - 10 miles at marathon pace

- Alternate from week to week

LONG RUNS

- The most important workout
- Rest the day before
- Rest or cross-train the day after
- Pace is goal MP plus 30-60 seconds
- Practice drinking
- Terrain similar to marathon
- As race nears, run at the same time of day as race
- Be disciplined and follow the schedule, but some flexibility is wise in case of illness, injury or chronic fatigue

CROSS TRAINING

- Minimize injury

- Add variety

- Running equivalence (same amount of time as running workout)

- Bike, stairsteppers, cross trainers, swimming

REST DAYS

- Recovery is needed from hard workouts

- Substitute rest days as needed

- Important to ensure quality workouts

- Resist increasing mileage for your journal

Three Weeks to Go

- Last long run

- Reduce weekly mileage the three weeks before the marathon

- Final week (3 or 4 miles with a couple of days off)

- No weight training the last week

- Avoid getting to the starting line overtrained

- Final week: Carbo-load and hydrate, but reduce caloric intake as you cut back your training

THE DAY BEFORE

- Plan carefully: clothes, shoes, logistics

- Rest your legs

PRE-RACE

- Awaken three hours prior to start.

- Eat? Ingest calories – liquid or solid.

- Drink? Start hydrated.

- Warm-up?

- Nothing new.

THE RACE

- Don't start too fast.

- Be careful with a crowded start.

- Check your pace.

- Be mindful of your breathing.

- Drink 400-800 ml/hr. of Sports Drink.

- The second half: concentration and mental toughness.

POST RACE

- Refuel within 30 to 120 minutes

- Walk and stretch

- Immune system and vulnerability

- 26 days to recover

FIRST

Discussion ?
Comments ?
Q & A

Thank You