Running F.A.S.T.E.R.

Don Kessler, M.Ed., A.T.C.
Athletic Trainer BUD/S
Naval Special Warfare Center
DISCLOSURE

The presentation and content are not represented by any sponsor, organization or the US Navy, and are the sole view of the author.
- Is it desirable to alter a runners style?
- Is it possible to change a running style?
- Is there a running style that is more efficient?
- Can running changes decrease medical problems?
- What are the outcomes?
• Unique Patient Population
• Boots, pants, beach
• Multiple miles per day
• 60% of injuries are stress changes or fractures
• 71% from non running sports background
• Bone density vs running style
Learning techniques from Alberto Salazar
Practicing techniques
Online Courses
Research
Applying techniques to patients
FASTER

- Oregon Project
• FASTER
FASTER

- Gait retraining
- Feasibility of improving running economy
- Gait modification
- Managing bone stress injuries

FASTER

• **F** - Forward Lean

• 5 to 7 degrees

• posture straight-attention

• don’t bend at the waist

• Anderson, 1989; Burfoot, 2012; Dicharry, 2013
FASTER

• **A** - ARMS

• hips to nips

• stop rotation

• power and balance
  • Ariellano, 2014; Nicola, 2012; Diacharry, 2012
FASTER

• **S**- Stride length

• land close to the center of gravity

• stride length decrease, stress fx. Decrease

• stride length increase, energy output increased

  • Kasmer, 2013; Almeide, 2015; Breen, 2015; Napier, 2015; Edwards, 2009; Derrick, 1988
FASTER

• **T**-Trail width or Step width
• foot placement close to center of body
• wider is slower but more balanced
• narrow more economical but may increase some medical problems

• Meardon, 2014; Brindle, 2014; Williams, 1991; Boyer, 2015; Allen, 2016
FASTER
FASTER

- E-Explode-landing on midfoot
- Barefoot running
- Stride length decreases
- more economical
- less contact time
- power off big toe

FASTER

• R-RPM
  - rate of turnover- cadence
  - 180 rpm both legs or 90 rpm one leg
  - less impact
  - decrease stride length
  - more midfoot landing

FASTER
• 104 stress fractures in last 3 years
• 67% have gone on to grad*
• 3 repeat stress fractures*
• All have passed the 4 mile run
FASTER

- Protocol
- Crutches, UBE
- Exercise bikes, rehab exercises
- Low weight bearing running
- Treadmill running
- Video
- Instructions, increase mileage
FASTER
SUMMARY
- It is important to evaluate and modify style
- It is possible to effectively change style
- Changing style can decrease injuries
- Efficiency may increase speed
- FASTER is an easy tool to effect change and give the runner a MENTAL image for form
THE END