Running for Success

Lunch and Learn series
April 18, 2018

Kristin Abbott, MD
Northwestern University Health Service
NU Team Physician
**FORMAL EXERCISE**

- **Intro Pilates class**
  - 3.5
  - 105-131 cal / 30 min
  - Better for lighter workouts and beginners

- **Walking 4.0 mph**
  - (very briskly)
  - 5.0
  - 150-188 cal

- **Weightlifting**
  - (vigorous)
  - 6.0
  - 180-225 cal
  - Better for harder workouts and experienced exercisers

- **Swimming front crawl**
  - (slow pace)
  - 8.0
  - 240-300 cal

- **Boot camp / Calisthenics**
  - (vigorous)
  - 8.0

- **Running 9:00 / mile**
  - 11.0
  - 330-413 cal
Health benefits of running

- Reduced all-cause mortality, longer life expectancy
  - 3 years added life expectancy for recreational runners
  - Even as little as 50 minutes per week of light jogging (5-10 minutes per day)
  - Reduced risk of death from heart disease
- Improves heart health
- Improves blood sugar control and metabolism
- Strengthens bone density
- Lowers risk of diabetes
- Reduces cancer risk
- And much more!
Mental health benefits of running

- Reduced rates of depression
- Improves learning abilities and sharpens memory
- Slows rate of brain aging
- Alleviates anxiety
- Improved sleep quality
- Increased creativity
- Improved self-esteem
- Decreased craving for unhealthy foods and substances
- Boosts recovery from substance abuse
Common Running injuries: “Runner’s Knee” or Patellofemoral pain

- Diffuse, aching knees, usually front of the knee
- “under the knee cap”
- Occurs due to improper tracking of the patella
  - Due to muscle imbalance of gluteal muscles, quads, hamstring
- Usually occurs when starting a running program
  - Or advancing volume/intensity too quickly
  - May occur with change in terrain
- Successfully treated with physical therapy exercises
- Not dangerous to run through, but pain may cause compensation in movement patterns and other injuries
Common Running injuries: IT band pain

- Most common cause of lateral knee pain in runners
- Occurs due to friction of the IT band at the lateral side of the knee
- May develop swelling
- Treated with ice, foam rolling, physical therapy exercises
- Can prevent by keeping good muscle strength in gluteal muscles and doing a slow progression/advancement of volume and intensity
- Sometimes shoe inserts may help with pain if you pronate or supinate significantly
Common Running injuries: Achilles tendonitis

- Inflammation along the Achilles tendon
- Usually occurs with sudden change in volume or intensity, or in terrain (new hills or running surface)
- Honor this pain, running through Achilles pain may turn into chronic issue that takes longer to heal
- Use ice, ibuprofen/naproxen
- Rest from running specifically, start gentle stretching and physical therapy
- See health care provider early to keep it from becoming chronic
Common running injuries

Shin Splints – MTSS

Tibia (Shinbone)

Fibula

Shin Splint Pain
Common running injuries: Hip flexor strain/tendonitis

- Pain in the front of the hip, usually occurs if adding speed work or jumping/hurdles in your running routine
- Pain worse with lifting leg (going up stairs)
- Tendonitis or muscle injury of the hip flexor
- Treat with rest, ice early, then heat after a few days
- Gentle hip flexor stretching
- Physical therapy to restore strength and return to running
- Seek medical evaluation if not improving after few days, or if progressively worsening
Common running injuries: Stress fracture

Stress fracture of metatarsal bone
Injury Prevention for runners

- Gradually increase distance/time
  - 10% rule- do not increase volume by more than 10% per week
  - Need a good base of running before progressing training for ½ marathon or marathon- at least 3-6 weeks!
  - If not currently running, start with a 2-3 month progressive walking program, then add in running

- Proper shoe wear- supportive shoes
  - New pair after 500 miles of running

- Build in recovery days during training
  - Cross-train, low impact activities
  - Stretching, yoga
Injury prevention

- Hydrate!
  - Hydrate through the day, even before a workout
  - Fluid needs during exercise are individual-specific
  - In general drink 12 to 26 oz/hr of exercise
  - Replace fluid loss after exercise session

**AM I HYDRATED?**

Urine Color Chart

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>If your urine matches the colors 1, 2, or 3, you are properly hydrated.</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Continue to consume fluids at the recommended amounts.</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>If your urine color is below the RED line, you are DEHYDRATED and at risk for cramping and/or a heat illness!!</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>YOU NEED TO DRINK MORE WATER!</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Injury prevention for runners

https://www.teamusa.org/About-the-USOC/Athlete-Development/Sport-Performance/Nutrition/Athlete-Factsheets-and-Resources
Follow @FuelupNU for more nutrition facts and inspiration
Injury Prevention exercises

- Core strength
- Gluteal/hip strength
- Dynamic control and stability of single leg squats
- Maintain balance between flexibility and strength in quads and hamstring
- Foam rolling before or after workouts for recovery and maintain tissue flexibility
Listen to your body

- Pain is a warning that something may be wrong
  - Take a few days off from running, change to different low impact activity
- Seek evaluation with healthcare provider if pain does not improve after a few days, or if it limits your ability to exercise
- Do not ignore pain that is worsening with running

- HAVE FUN!