



Progressing at Your Pace

Lisa Levin & Julie Sapper, RRCA Certified Running Coaches

Run Farther & Faster

www.runfartherandfaster.com

Run Healthy & Strong

- **Biomechanics**
- **Shoes and Gear**
- **Training Progression**
- **Nutrition and Hydration**
- **Strength and Stretching**
- **Running Injuries**
 - **Overview**
 - **Common Injuries**
 - **Treatment**
- **Fitting It In**

Biomechanics

- **Running Cadence- number of footfalls per minute**
 - Ideal cadence around 180 footfalls per minute
 - Work on gradually increasing cadence by turning feet over faster- does NOT mean running faster
- **Key form pointers:**
 - Run with slight forward lean
 - Land on mid-foot
 - Land with feet under knees/center of gravity
- **Breathing**
- **Stride-Outs**
 - Perform at the end of a moderate run
 - Speed up to 95% of max for 20 seconds
 - Focus on maintaining good form

Running Shoes and Gear

- **Shoes:**
 - **Get fit at a specialty running store (RNJ Sports)**
 - **Trained staff will watch you run and select proper shoe for biomechanics (Stability, Cushion)**
 - **Replace shoes every ~300 miles**
 - **Natural/“Barefoot”/Minimalist Running Shoes- transition very gradually!**
- **Other helpful running gear**
 - **Technical fabrics**
 - **Watch/GPS**
 - **Summer gear**
 - **Hydration system**

Training Progression

- **Beginners: Start with run/walk intervals**
- **Do not add more than 10% time/distance per week**
- **During base-building phase, runs should be at conversational pace**
- **“Long run” should be no more than 30-40% of weekly mileage**
- **Spread runs out over the course of the week**
- **Adhere to hard/easy cycle, with days of easy running or rest following days of harder effort**
- **Incorporate Strength and Cross-Training**
- **Recovery days as important as workouts- SLEEP**

Strength and Stretching

- **Most running injuries result from weakness or strength imbalance in hips and/or core**
- **Incorporate strength training 2-3 times per week, 15-20 minutes per session:**
 - **Lunges**
 - **Squats**
 - **Planks**
 - **Single Leg exercises**
- **Do strength training on non-running days or after running, not before**
- **Stretch when muscles are warm**
- **Use foam roller to get deeper stretch**
- **Mobility**

Nutrition and Hydration

- **Good nutrition is key to performance and recovery**
- **Focus on whole foods to fuel workouts**
- **Hydrate before, during and after exercise! Urine should be “clear and copious”**
- **Pre-Run-**
 - **1-2 hours before exercise if possible**
- **During run-**
 - **Use nutrition on runs longer than 1.5-2 hours (100-200 calories/hour)**
- **Post-Run-**
 - **Complex carbohydrates restock glycogen stores and lean protein helps rebuild muscle**
 - **Protein to rebuild muscle and aid in recovery**
- **Limit use of alcohol and energy drinks**

Running Injuries- Overview

- **At least 70% of all running injuries are due to training errors- PREVENTIBLE!**
 - **The Terrible Toos: Too much, too soon, too fast**
 - **Know the signs of injury and what to do**
- **Expected Soreness vs. Pain:**
 - **Expected Soreness:**
 - **Lasts less than 48 hours**
 - **No redness or swelling**
 - **Symptoms generalized**
 - **No change in your walking or running pattern**
 - **Pain:**
 - **Lasts more than 48 hours**
 - **Redness, swelling**
 - **Limping; running form has changed**
 - **More localized**
- **Palm/Pointer Test**

Common Running Injuries

Injury	Symptoms	Suggested Treatment
Shin splints	<ul style="list-style-type: none"> • Usually occurs at the beginning of a training program • Pain along inner or front of lower leg • Tender to touch • Possible swelling 	<ul style="list-style-type: none"> • Avoid running on hard surfaces • Check your shoes to make sure they are not worn down • Stretch your lower leg muscles • ICE! Recommend ice bath for 10 minutes
Plantar fasciitis	<ul style="list-style-type: none"> • Pain on bottom of foot/heel • Pain usually worse in the morning • Pain may subside the more you walk, but eventually returns • Barefoot walking painful 	<ul style="list-style-type: none"> • Self- massage area (fingers, golf ball) • Check footwear- do you have enough support during the day AND during running? • Taping techniques and/or temp. arch supports • Ice: ice bath, roll foot over frozen water bottle • Strengthen leg muscles from hip to foot
Patello-femoral syndrome (Runner's knee)	<ul style="list-style-type: none"> • Pain around or underneath knee cap • Possible reports of knee 'popping' • Pain after prolonged sitting • Pain going up and down steps 	<ul style="list-style-type: none"> • Stretch hip flexors • Strengthen hip muscles – mainly gluteal muscles (side and back of hip) • Ice • Taping techniques
Iliotibial Band (ITB) Tendonitis	<ul style="list-style-type: none"> • Sharp pain outside of hip or knee • Mild swelling • Pain with steps, sometimes riding bike • Pain after prolonged sitting • Very tender to touch 	<ul style="list-style-type: none"> • Strengthen hip muscles • 'Stretch'/massage ITB gently • Ice

Something to think about: if you continue to stretch and massage a muscle, but it remains tight, then stretching and massage are not the answer. What is the answer?

Injury Treatment

- **Use ice first 48-72 hours- ice vs heat- which is best?**
- **Perform hip and core exercises: running specific; single leg ex.; 3-4x/week**
- **Check your shoes: change every 300 miles or sooner; are they the right type for your feet?**
- **Modify your training schedule: if you hurt walking, you will hurt running**
 - **Cross-train painfree for same amount of planned run time**
 - **Skip long runs, speed workouts, hills x 1 week**
 - **Rest: Better to take off 2-3 days now instead of 2-3 months later**
- **Stretch but don't overdo it**
 - **Stop at 'first barrier'**
 - **Must be painfree**
 - **Don't bounce**
 - **Perform when warm**
 - **Hold for at least 30 seconds gently**
 - **Consider making the first 1/2 mile of your run your warm-up: run 45-60 seconds slower than planned pace of run**
- **If pain persists for more than a week, it is time to seek out a healthcare professional's advice- Physician, Physical Therapist, Podiatrist**