



# OPTIMIZE YOUR PERFORMANCE...

- Before practicing or performing, begin with 5 minutes of warm ups for your body and stretching
- Start your practice session with less challenging repertoire (e.g., scales, long tones, etc.)
- Find neutral positions for your body whenever possible
- For every 25 minutes you play, take at least a 5 minute rest or movement break (during breaks rest your hands by limiting time on electronics)
- Cool down on your instrument for about 5 minutes at the end of practice sessions (play less challenging repertoire and techniques)
- Cool down with stretches after practicing
- Use mental practice techniques
- Practice efficiently (set goals and make detailed plans for the session)
- Practice with a mirror to identify your movement habits
- Start a mind-body or movement awareness practice
- Increase practice time and intensity slowly
- Follow the Return-to-Play Schedule after taking extended time off from playing
- Take care of your body as if it were your instrument (eat a well-balanced diet, exercise regularly, and get proper sleep)
- Adjust your practice when you feel tension or discomfort (decrease the intensity, speed, or length of practice)

## AVOID...



- Increasing practice by more than 20% per week
- Mindless practice
- Practicing when tired
- Poor postures and stressful positions during daily activities (e.g., sleeping, watching TV, driving a car, childcare)
- High stress and anxiety

# What Puts You at Risk for Injury?



- Not taking breaks
- Playing through fatigue or pain
- Skipping warm-ups and cool-downs for your body
- Skipping warm-ups and cool-downs on your instrument
- Having an instrument set-up that increases tension in your body
- Not exercising regularly
- Not eating enough nutrient-rich foods
- Not getting regular sleep



## What are the Early Signs of an Injury?

- Your muscles get tired more quickly or more easily than usual
- You have pain that gets worse when you practice or pain that does not go away after you stop practicing
- Clumsiness or difficulty with your dexterity while playing

## What Can You Do?

- Consult your occupational therapist or another medical professional
- Review your technique and discuss any discomfort with your teacher or professor
- Increase the amount of breaks you are taking while practicing, and decrease your overall practice time
- Follow general health recommendations for nutrition, sleep, and exercise

# Five Most Commonly Asked Questions By Injured Musicians

## **Q: Should I play through the pain?**

**A: NO** - Pain is a signal from the body that there is inflammation or micro-tears in the muscle, usually from overuse. This pain signal indicates that the muscle needs to rest. Practice should be resumed gradually so the muscles become reconditioned to the demands of instrumental playing.

## **Q: Should I be stretching?**

**A: YES** - Stretching is one of the best things for tight muscles and tendons. Stretching before and after playing, and during breaks is ideal.

## **Q: Should I use heat or ice?**

**A: YES** - Everyone responds differently to these modalities, but in general, ice should be used during the first 48 hours after an injury and heat should be used for tight muscles and tendons, or chronic discomfort.

## **Q: Should I change my playing schedule?**

**A: YES** - A good paced playing schedule is crucial to neuromuscular health. Limiting total playing time per day to less than 4 hours in divided sessions may be helpful. Playing for 10-25 minute segments with a 5 minute break between segments may be recommended.

## **Q: Should I change my positioning with the instrument?**

**A: YES** - It is recommended that a qualified therapist &/or physician observe positioning with the instrument to assess contributing factors to symptoms and make appropriate recommendations for adaptations.

Created by: **Kelly Belinsky, MS, OTR/L (Occupational Therapist)**, who has extensive experience treating musicians can be reached at two convenient Brigham and Women's Hospital locations. She offers expertise in pain management; modalities such as ultrasound; massage including myofascial release; posture training with musical instruments and computers; musical instrument adaptations; customized adaptive splinting; training in paced playing schedules; strengthening, conditioning, and endurance training; stress management & relaxation training; and Kinesiotaping. She is affiliated with Dr. Michael Charness, director of the Performing Arts Clinic at Brigham and Women's Hospital in Boston.

# How can you practice efficiently?

## Before Practice:

- **Set goals** for your practice session
- **Plan** out your session
  - What measures or sections will you focus on? What techniques or scales?
  - How long will you spend on each section, technique, scale, etc.?
  - Write out a plan (you may use a template such as the one created by Gerald Klickstein, found at [www.musiciansway.com/downloads/practicesheet.pdf](http://www.musiciansway.com/downloads/practicesheet.pdf))
- **Collect** everything you need for your session:
  - Your written plan
  - Your practice schedule
  - Timer
  - Music
  - Pencil
  - Stand
  - Water
  - Anything you need to warm up and cool down your body
  - Cushions, straps, or other materials you use to keep your body in proper position while playing

## During Practice:

- Take a 5 minute physical and mental break at least every 25 minutes
- Break your music into sections, rather than playing from start to finish every time. Focus on the most challenging sections
- Use a metronome and practice more slowly
- Record yourself (video if possible) and review your recording
- Mark your part
- Problem-solve challenging sections by trying new things (do not just expect to improve by repetition)
- Do not always start from the beginning - start from the end or another section

## After Practice:

- Review your practice session
  - What went well and what do you want to improve?
  - What did you do that resulted in success?
  - What specific things can you do to improve next time?
- Plan out your next session
  - Write down your plan so you do not forget it!

## Practice *without* your instrument:

### Listen

- Listen to different recordings and decide what decisions you will make musically or technically
- Follow the score while you listen
- Mark your part for musical or technical decisions as you listen

### Imagine

- Find a quiet place where you can focus, close your eyes, and mentally picture yourself playing the piece perfectly
- Imagine exactly what it would feel like for each part of your body to play the piece
- Practice this by section, only moving on to the next section as you have mastered the previous section. This is also helpful for memorization



- 1 Feet hips width apart and flat on the floor**
- 2 Hips and knees at 90 degrees or slightly greater**
  - Raise the back legs of the chair or use a slightly slanted seat cushion if needed
  - Tilt your pelvis forward or use a wedge cushion to create a slight, natural curve in your lower back
- 3 Place music 15 degrees below horizontal eye level**
  - Your stand should be about 2 feet away from you
  - Keep your music 15 degrees below the level of your eyes
- 4 Use general or natural light**
  - Avoid local lighting (e.g., music stand lights) when possible, or other light that causes glare
  - Make sure you can see without straining your neck or body.
- 5 Set yourself up for success!**
  - Bring everything you need to stay well and be efficient
  - Stay hydrated
  - Make a plan for your session and stick to it using a timer on your phone, watch, or computer
  - Bring a yoga mat, massage ball, bands, foam roller, or any other items you need for completing body warm-ups/cool-downs and exercises during breaks
  - Stay on your practice schedule if returning to play

# IMPROVE YOUR POSTURE AND POSITIONING

- Keep each of your joints in a relaxed and natural position
- Use your larger muscle groups to hold your instrument
  - For example: engage your upper back and shoulder muscles to relieve pressure and support your instrument instead of grasping tightly from your hands and forearms
- Find positions that support symmetry on each side of your body
- Relax through your neck and above your shoulders

## TIPS FOR STANDING



VS.

## TIPS FOR SITTING



1. Place your feet hips-width apart
    - Feet may point forward, or may be turned slightly outward
  2. Let your knees have a slight, natural bend
  3. Let your hips tilt forward slightly, allowing your low back to curve naturally
  4. Pull your chest up and away from your stomach, allowing your stomach to expand as you inhale
  5. Relax your shoulder blades down your back
  6. Let your shoulders hang away from your head, resting them away from your ears
  7. Point the crown of your head towards the sky. Allow length through your neck as you relax any tense neck muscles
  8. Unclench your jaw and release any extra tension in your face
1. Place your feet hips-width apart and flat on the floor
  2. Put your knees at a 90 degree angle (or slightly greater)
  3. Check that your hips sit above your knees
  4. Let your hips tilt forward slightly, allowing your low back to curve naturally
  5. Pull your chest up and away from your stomach, allowing your stomach to expand as you inhale
  6. Relax your shoulder blades down your back
  7. Let your shoulders hang away from your head, resting them away from your ears
  8. Point the crown of your head towards the sky. Allow length through your neck as you relax any tense neck muscles
  9. Unclench your jaw and release any extra tension in your face

# Use Your Body Efficiently



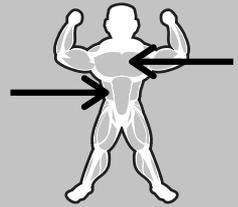
When lifting music equipment, instruments, or other objects, bring them closer to your body to lessen the tension on your back



Lift with your legs instead of using your back. Bring your feet further apart and bend at your knees as you lift



Use larger muscle groups (such as your back, chest, abdominals, and legs) when lift heavy objects or holding light objects such as your instrument for long periods of time



Lift and carry objects with your palms facing upwards when you can (this will help you use your biceps)



Push objects instead of pulling them (this includes rolling instrument cases or equipment)



## Aim for Neutral Positions While Practicing

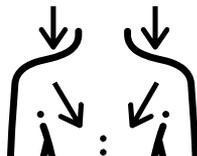
### Low back:

Allow a natural curve while sitting or standing



### Shoulders:

Keep your shoulders down and level with each other



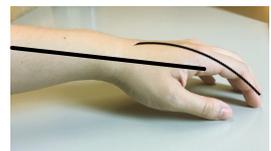
### Neck:

Lengthen upwards and allow a natural curve in your neck



### Wrists/Hands:

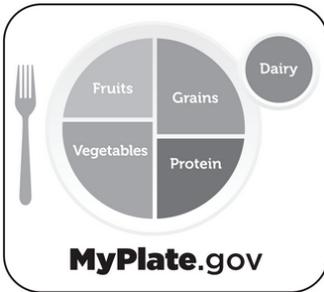
Keep your fingers slightly rounded, with a small downward angle at your wrists



# Keep Yourself Well!

## Nutrition

### Eat a balanced diet



Download the "Start Simple with MyPlate" App to access personalized recommendations



Have a light meal 2-3 hours before performing



Stay hydrated with water instead of caffeinated or sugary drinks. Try to drink at least 2 water bottles per day



Minimize alcohol intake (drink no more than 1-2 drinks per day). Avoid alcohol prior to performances



Minimize intake of added sugars to 24 grams per day or less



Minimize saturated fats to be less than 10% of your daily calories

## Sleep



Get the recommended amount of sleep depending on your age:

**13-18 years old:** 8-10 hours per 24 hours

**18-60 years old:** 7 or more hours

**61-64 years old:** 7-9 hours

**65 years and older:** 7-8 hours

### For Better Sleep...

- Be consistent! Go to bed and wake up at the same times every day
- Instead of watching the clock, if you have not fallen asleep after 20 minutes get out of bed and do a relaxing activity (read, draw, journal, etc.)
- Avoid using electronics in the 30 minutes prior to your bed time
- Avoid alcohol, caffeine, and large meals prior to bed

## Exercise

Exercise with **moderate intensity** for at least **150 minutes per week**

**What is moderate intensity?**

- Heavy breathing
- Can easily hold a conversation

**OR**

Exercise with **vigorous intensity** for **75 minutes per week**

**What is vigorous intensity?**

- Heavy breathing
- Can only say a few words before taking a breath



Try to do muscle strengthening exercises on at least 2 days per week



# MUSCLE STRAIN AND OVERUSE INJURY



## WHAT IT IS

- Over-stretching, tearing, or inflammation in your muscle
- Symptoms: pain, decreased range of motion, spasms, weakness, numbness, and swelling



## CAUSES

- Repetitive movements
- Sustained positions
- Practicing without warm-ups, cool downs, and breaks



## PREVENTION

- Warm-up and cool down for practice sessions
- Follow general prevention tips such as taking a 5 minute break every 25 minutes
- Use larger muscle groups (upper back or chest muscles) to support the instrument and reduce tension in smaller muscle groups (hands or forearms)



## WHAT TO DO

- Increase breaks during practice sessions (use breaks to complete exercises as recommended by OT)
- Warm-ups and cool downs
- Keep dynamic postures
- Modify instrument setup and practice techniques to reduce exertion required for performance
- Limit the duration of your overall practice for the day

# Treatment At Home



## Heat



### When to use:

- Prior to practicing (as directed by your OT)

### What to do:

- Use a hot pack, warm towel, or other heat source
- Apply to joint or muscle where you are having pain
- Use for 5-20 minutes

### Considerations:

- Do NOT use if the injury is new (within the last 3 days)
- Do NOT use if your skin is open or damaged



## Ice



### When to use:

- After your last practice session of the day
- When you have swelling

### What to do:

Fill a paper cup with water and freeze

- Rub ice onto skin
- Move the ice in small circles on your skin for no more than 10 minutes

**OR:** Apply a cold gel pack for 10 minutes

### Considerations:

- Discontinue if joints become stiff



## Stretching

### When to use:

- After practicing
- Throughout the day to prevent stiffness and promote mobility

### What to do:

- Move the joint in one direction until you feel a **slight** stretch
- Hold the stretch for 15-30 seconds and repeat as directed by your OT

### Considerations:

- Be careful not to over-stretch
- Do not stretch injured muscles/joints unless directed to do so by your OT



## Massage

### When to use:

- After practicing
- When you have swelling and are directed to do so by your OT

### What to do:

- **Soft tissue:** Lightly massage the largest part of the muscles focusing on areas that have the most tightness
- **Retrograde:** For swelling. Massage from the area of swelling toward your upper arm

### Considerations:

- Follow recommendations by your OT to find out what is most appropriate for you

# ALTERNATIVE METHODS

## Alexander Technique

**What it is:** Body and movement awareness practice including movement sequences and hands-on work with a practitioner, often in individual sessions. Uses body mapping, explores the difference between "doing" a movement and thinking about the movement, and is primarily taught through chair/table work

**Purpose:** Increasing awareness for efficient movement and reduction of tension (in daily life and while practicing or performing)

**Goals:** Understanding movement habits, improving spatial awareness, retraining posture and movement patterns, improving breath-work, and reducing tension

**Further info:** <https://www.alexandertechnique.com/at/>

## Feldenkrais Method

**What it is:** Body and movement awareness practice that includes group and individual sessions. Uses body mapping, explores movement through "doing" movements, and is primarily taught through floor work

**Purpose:** Increasing awareness for efficient movement and reduction of tension (in daily life and while practicing or performing)

**Goals:** Re-educating the neuromuscular system to improve body awareness, flexibility, balance, breath, and coordination

**Further info:** <https://www.feldenkrais.com/feldenkrais-method-faqs>

## Tai Chi

**What it is:** Exercise and movement-based meditation practice (may differ depending on practitioner)

**Purpose:** Practicing movement patterns and breath that support energy flow through the body

**Goals:** Reducing stress, improving blood flow, posture, and balance; increasing flexibility, endurance, and strength

**Further info:** <https://www.brighamandwomens.org/osher-center/tai-chi>

## Mindfulness Meditation

**What it is:** A meditation practice. Brings attention to and observes the present moment. Practice encourages putting aside judgments, and exploring internal thoughts and reactions to external surroundings

**Purpose:** Increasing awareness of your mental, emotional, and physical being

**Goals:** Reducing the impact of your pain, increasing focus, and decreasing stress

**Further info:**

[https://hr.harvard.edu/files/humanresources/files/mindfulness\\_now\\_and\\_zen.pdf](https://hr.harvard.edu/files/humanresources/files/mindfulness_now_and_zen.pdf)