

# Injury Prevention & Performance Enhancement for Musicians

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## Performing Arts Medicine Intro

- Occupational therapy; sports medicine; dance; music
- Resources at ESM
  - Dr. Ralph Manchester; Sue Callan-Harris, PT; *Keys to Healthy Music Course*
- Published Research
  - At any given point in time, 50% of performers in professional symphony orchestras are having problems related to a performance related injury (PRI) (individual studies range from 50-80%)
  - 10% of college level instrumental performance majors sustain a PRI each year
    - (this number is expected to be much higher since the study did not include all majors and limited the focus to arm and hand problems)
- Injury Risk factors:
  - (Intrinsic) Structural and functional characteristics of the performer, such as posture and learning style
  - (Extrinsic) Characteristics of the environment
  - (Modifiable factors) muscle strength and number of hours of practice per day
  - Change in playing: increase in time, difficulty, stressful circumstances
  - Instrument: Which instruments have the highest injury rate? The lowest?
  - Mystery: the role of technique — the interaction between technique and various aspects of the human body (health care perspective & music pedagogy perspective)

## Prevention & Enhancement

- Healthcare Providers
- Self-treatment: tennis ball, bouncy ball, arm roller, ice massage, heat pack
- Warm up & conditioning (away from the instrument! See below)
- The Healthy Mind Platter
- Alternative & Complementary Medicine
- Exercise
- Diet & Nutrition
- Sleep hygiene

## Movement: Warm up away from the instrument

- The human body is made to move (benefits of exercise; time/benefit analysis; Tai Chi: stagnant water vs. running river analogy)
- Musicians, similar to injuries seen in occupational therapy and sports medicine
- MuseMoves: Instrument Group Specific Movement Routines
  - Low impact
  - no equipment needed; anytime/anywhere
  - Exercises compiled from Sports Medicine, Tai Chi, and Yoga
  - Videos are being published at The Healthy Musician Project

### Warm-up

Arm Swings  
Tai Chi Rotations  
Foam Rolling

### Stretch

Wrist stretch  
Chest stretch

## **Mobility**

Lat Stretch  
Side lying trunk rotation  
Cat N Camel

## **Conditioning**

Tri-plane lunges  
Front planks  
Push ups/Cobra  
Standing Ts & Ys

## **Cool down/fascial release**

Arm Swings  
Tai Chi Heel Stomp  
Foam rolling

# The Healthy Mind Platter

Seven essential mental activities necessary for optimum mental health in daily life. These seven daily activities make up the full set of 'mental nutrients' that your brain needs to function at its best. By engaging every day in each of these servings, you enable your brain to coordinate and balance its activities, which strengthens your brain's internal connections and your connections with other people.

**FOCUS TIME** | When we closely focus on tasks in a goal-oriented way, taking on challenges that make deep connections in the brain.

**PLAY TIME** | When we allow ourselves to be spontaneous or creative, playfully enjoying novel experiences, which helps make new connections in the brain.

**CONNECTING TIME** | When we connect with other people, ideally in person, or take time to appreciate our connection to the natural world around us, richly activating the brain's relational circuitry.

**PHYSICAL TIME** | When we move our bodies, aerobically if possible, which strengthens the brain in many ways.

**TIME IN** | When we quietly reflect internally, focusing on sensations, images, feelings, and thoughts, helping to better integrate the brain.

**DOWN TIME** | When we are non-focused, without any specific goal, and let our mind wander or simply relax, which helps our brain recharge.

**SLEEP TIME** | When we give the brain the rest it needs to consolidate learning and recover from the experiences of the day.

There's no specific recipe for a healthy mind, as each individual is different, and our needs change over time too. The point is to become aware of the full spectrum of essential mental activities, and just like the essential nutrients, make sure that at least every day we are nudging the right ingredients into our mental diet, even for just a little time. Just like you wouldn't eat only pizza every day for days on end, we shouldn't just live on focus time and little sleep. Mental wellness is all about giving your brain lots of opportunities to develop in different ways.

*Source: The Healthy Mind Platter, created in collaboration by Dr. David Rock, executive director of the NueroLeadership Institute, and Dr. Daniel Siegel, executive director of the Mindsight Institute and clinical professor at the UCLA School of Medicine.*

## External Resources

- Performing Arts Medicine Association
- Medical Problems of Performing Artists (journal, available online)
- Athletes & The Arts
- The Healthy Musician Project