Health Education

A focus on a sustainble and healthy work life as a musician

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Association Européenne des Conservatoires, Académies de Musique et Musikhochschulen

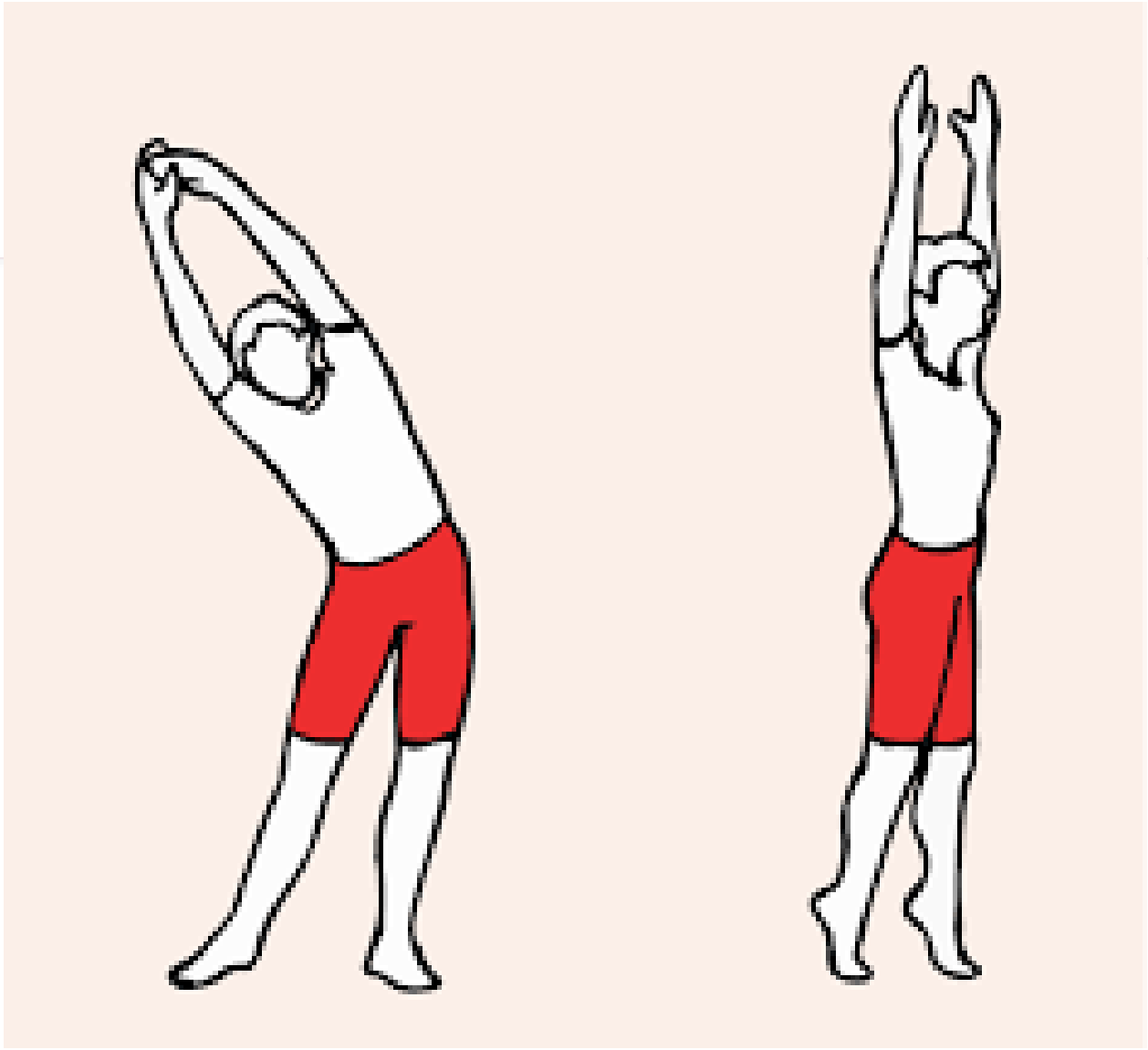
Take home message today

”Your body and mind is a part of your instrument and it also needs to be trained to create a sustainble life as a musician”

https://olympics.com/athlete365/well-being/five-expert-tips-to-help-athletes-stay-positive/

Warm-up

- mild-moderate
- Increase blood flow



Stephanie Mann

- **2006-2007:** student at the classical MGK
- **2011:** BSc in physiotherapy
- **2017:** MSc in physiotherapy
- **2023:** PhD in Musicians´ Health

Why is it important to have focus on muscians health?

GREAT EDUCATION

Ref:
The health and wellbeing of professional musicians and music creators in the EU. 2023. https://doi.org/10.2766/481949

GREAT SENSE OF MEANING IN LIFE

SOCIAL SKILLS

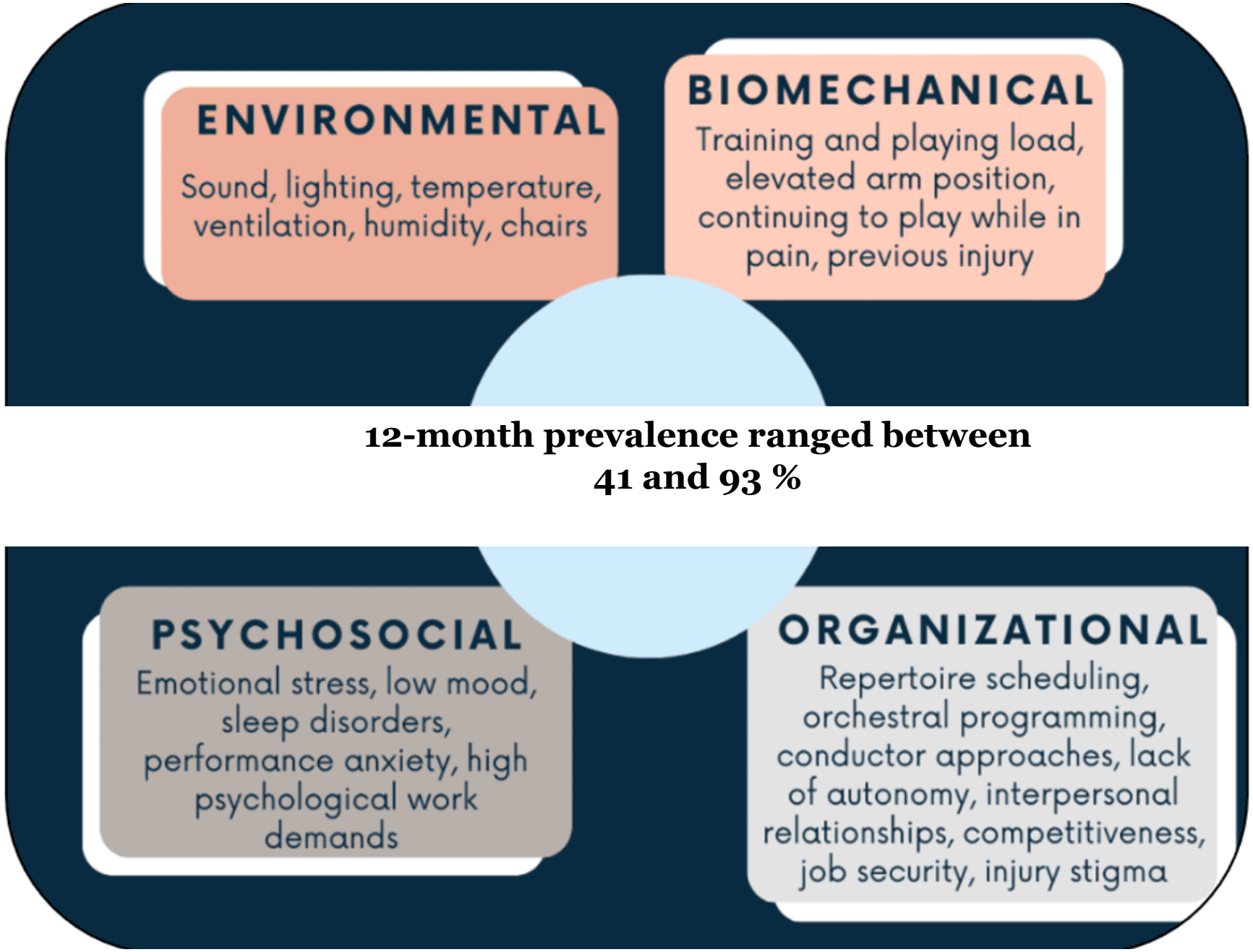
MENTAL BENEFITS

PHYSICAL BENEFITS

“career progression has to happen now”

- leads you to (over)practise and perform a lot.

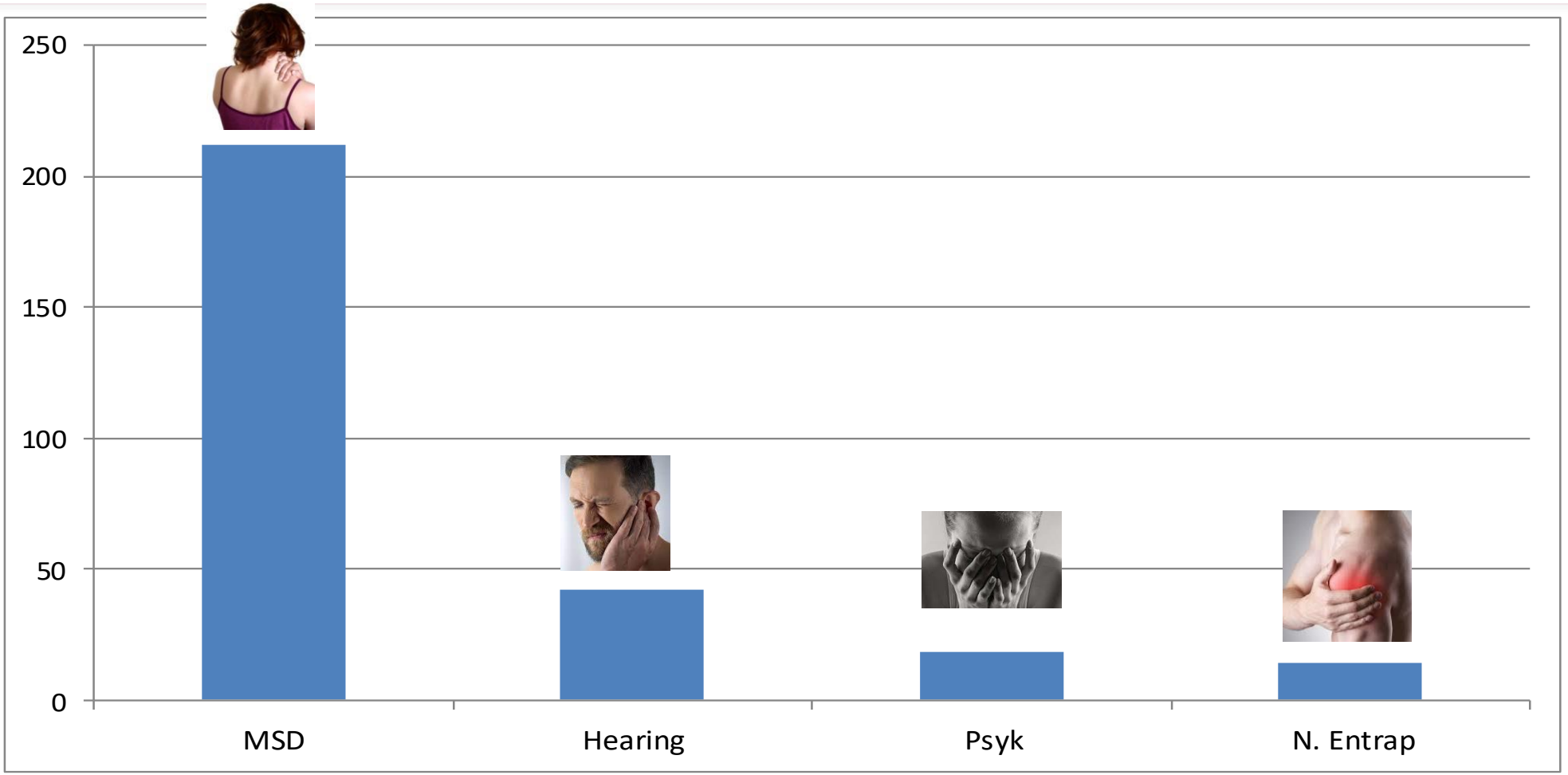
Managing health is an important part of building a sustainable career, just as important as mastering the instrument



12-month prevalence ranged between 41 and 93 %

June Sheren et al. https://lnkd.in/gwUKmk2f

Work-related disorders amongst professional musicians!



Pain

Cochrane Library

Cochrane Database of Systematic Reviews

Ergonomic interventions for preventing work-related musculoskeletal disorders of the upper limb and neck among office workers (Review)

Hoe VCW, Urquhart DM, Kelsall HL, Zamri EN, Sim MR

Pain = Standing / sitting incorret (bad posture)

It is the time that is a factor of pain development

Awkward positions/twisted

Repetitive work

Static work

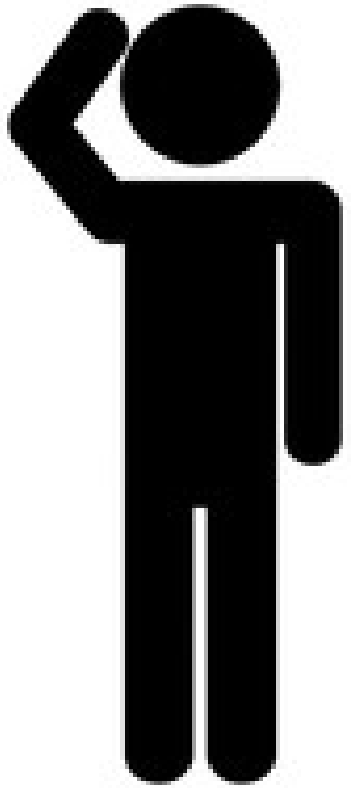
Pain?

”An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.”

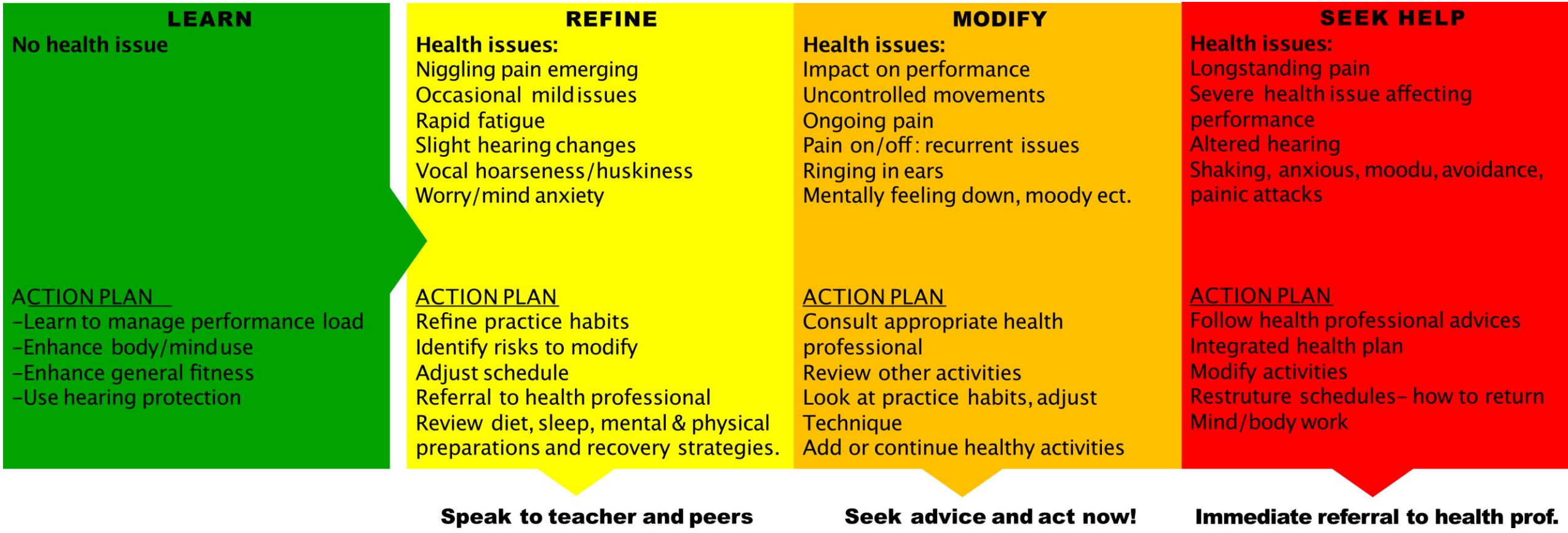
- **Always subjective!**
- **Always reel in the bio-psyco-social model**

Butler et Moseley, Explain Pain, Noigroup Publications

What to do?



Look after your health



Ackermann & Ginsborg 2022

Music teachers= ”unique opportunity”

- Has regular meetings with student
- Can hear and ”see” the music
- **Witnesses difficulties in interpretation** (FIRST!)
- Works on technique and repertoire
- Listens to student’s thoughts (MORE OFTEN)
- Be aware of sudden increased workload levels can lead to pain

You might discover early signs of disorders!

Student	Date	Looking for:	Asking about:	Teacher's comment:
		Overuse	Pain	
			Fatigue	
			Hours of pratice	
			Breaks	
		Misuse	Repetoire	
			Tension	
			Technique	
			Posture	
		Activities	Jobs	
			Exercise	
			Lifting/carrying	
			Laptop/Phone	
		Psychosocial	Mood	
			Stress	
			Sleep/diet	
			Social	
		Circumstances	Holidays	
			Examinations	
			Auditions	

What should the teacher advice:

PRICEM if acute e.g. sprain and painful; 2-3 days

- P = Promt/protect
- R = Rest
- I = Ice
- C = Compression
- E = Elevation
- M = Movement/Mobilisation

2-3 weeks modifying:

- P = Practice
- O = Other activites
- R = Repertoire
- T = Technique

Is same or worse: refer to clinician!

Plan:

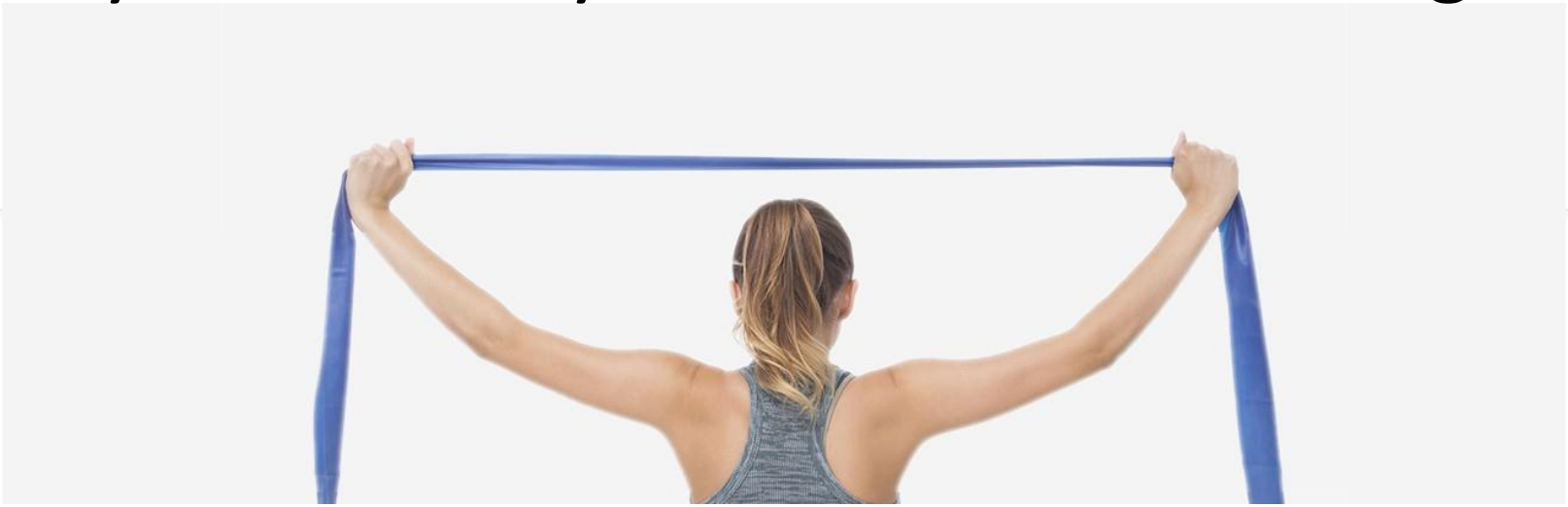
- Mental exercise
- Warm-up
- Strenght training

Resistance bands

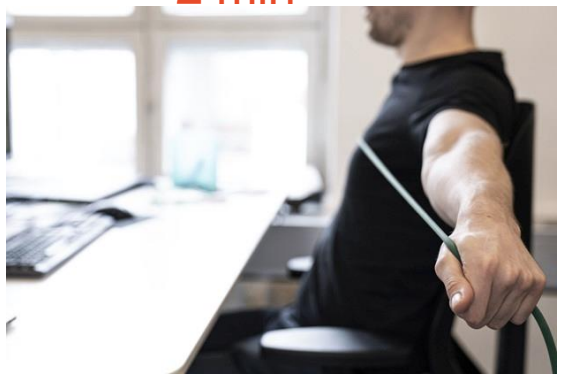
- Resistance bands
- **Yellow easy → Red→ Green → Blue → Black → Silver → Gold**.

- Choose one where you only can lift it 12 times (repetions) (12 RM)

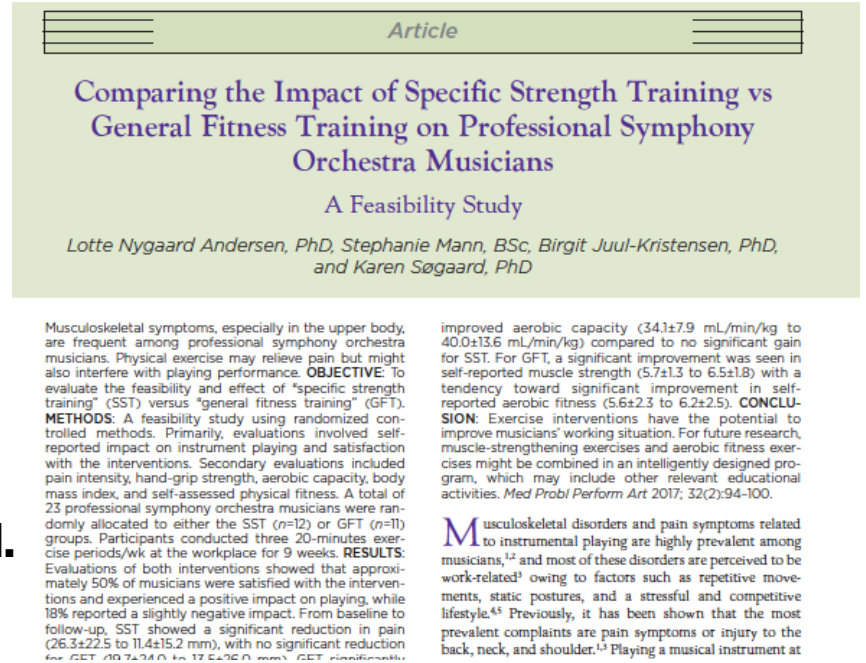
Physical Activity and Health in Working Life



2 min



Effectiveness of small daily amounts of progressive resistance training for frequent neck/shoulder pain: randomised controlled trial. Lars L. Andersen



Article

Comparing the Impact of Specific Strength Training vs General Fitness Training on Professional Symphony Orchestra Musicians

A Feasibility Study

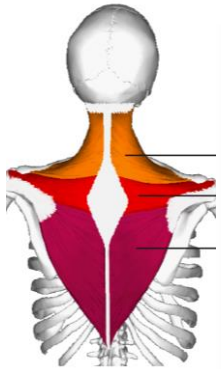
Lotte Nygaard Andersen, PhD, Stephanie Mann, BSc, Birgit Juul-Kristensen, PhD, and Karen Søgaard, PhD

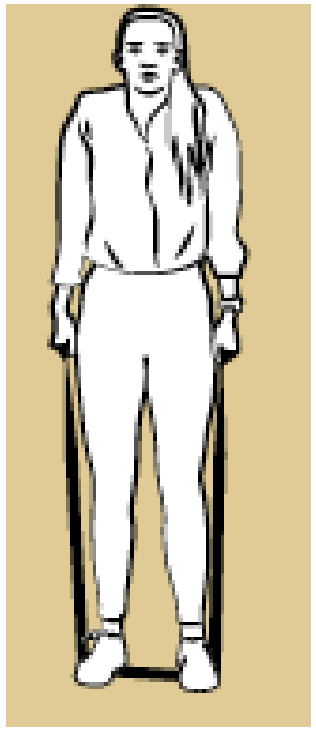
Musculoskeletal symptoms, especially in the upper body, are frequent among professional symphony orchestra musicians. Physical exercise may relieve pain but might also interfere with playing performance. **OBJECTIVE**: To evaluate the feasibility and effect of "specific strength training" (SST) versus "general fitness training" (GFT). **METHODS**: A feasibility study using randomized controlled methods. Primarily, evaluations involved self-reported impact on instrument playing and satisfaction with the interventions. Secondary evaluations included pain intensity, hand-grip strength, aerobic capacity, body mass index, and self-assessed physical fitness. A total of 23 professional symphony orchestra musicians were randomly allocated to either the SST (n=12) or GFT (n=11) groups. Participants conducted three 20-minutes exercise periods/wk at the workplace for 9 weeks. **RESULTS**: Evaluations of both interventions showed that approximately 50% of musicians were satisfied with the interventions and experienced a positive impact on playing, while 18% reported a slightly negative impact. From baseline to follow-up, SST showed a significant reduction in pain (26.3±22.5 to 11.4±15.2 mm), with no significant reduction for GFT (19.7±24.0 to 17.5±25.0 mm). GFT significantly improved aerobic capacity (34.1±7.9 mL/min/kg to 40.0±13.6 mL/min/kg) compared to no significant gain for SST. For GFT, a significant improvement was seen in self-reported muscle strength (5.7±1.3 to 6.5±1.8) with a tendency toward significant improvement in self-reported aerobic fitness (5.6±2.3 to 6.2±2.5). **CONCLUSION**: Exercise interventions have the potential to improve musicians' working situation. For future research, muscle-strengthening exercises and aerobic fitness exercises might be combined in an intelligently designed program, which may include other relevant educational activities. *Med Probl Perform Art* 2017; 32(2):94-100.

Musculoskeletal disorders and pain symptoms related to instrumental playing are highly prevalent among musicians,[1,2] and most of these disorders are perceived to be work-related[3] owing to factors such as repetitive movements, static postures, and a stressful and competitive lifestyle.[4,5] Previously, it has been shown that the most prevalent complaints are pain symptoms or injury to the back, neck, and shoulder.[1,3] Playing a musical instrument at

Training

How much can an untrained musicans lift?



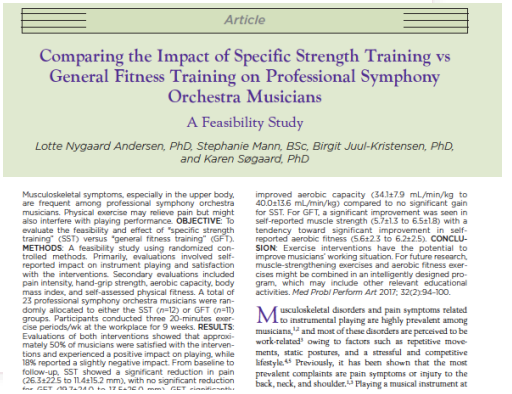


12 repetitions af 3 rounds

- Your guess
- 8-12 kg.

Increase workcapacity=
Stronger muscles, better blood flow= easier to keep a static position.

Exercises tested among muscians



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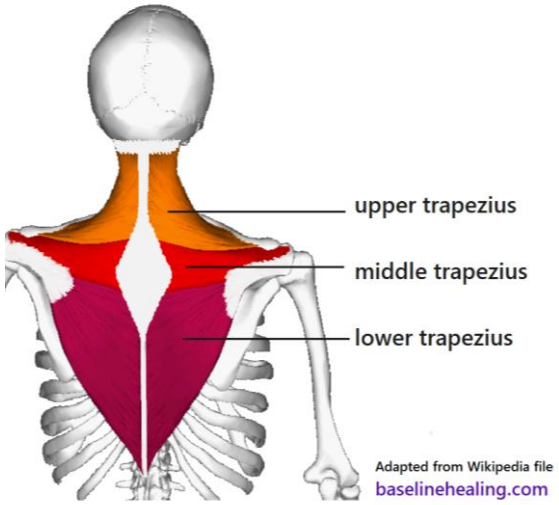
Load progression and Exercises

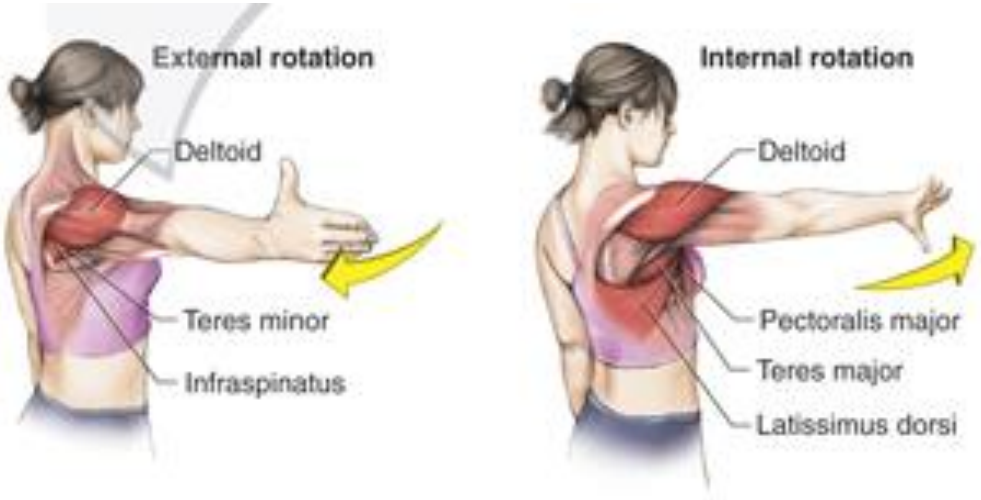
Week 1:	3 x 15 RM
Week 2-3:	3 x 12 RM
Week 4-5:	3 x 10 RM
Week 6-8:	3 x 8 RM
Week 9-12:	3 x 6 RM

The last repetition should be the maximum you can take.
More load when fewer RM.

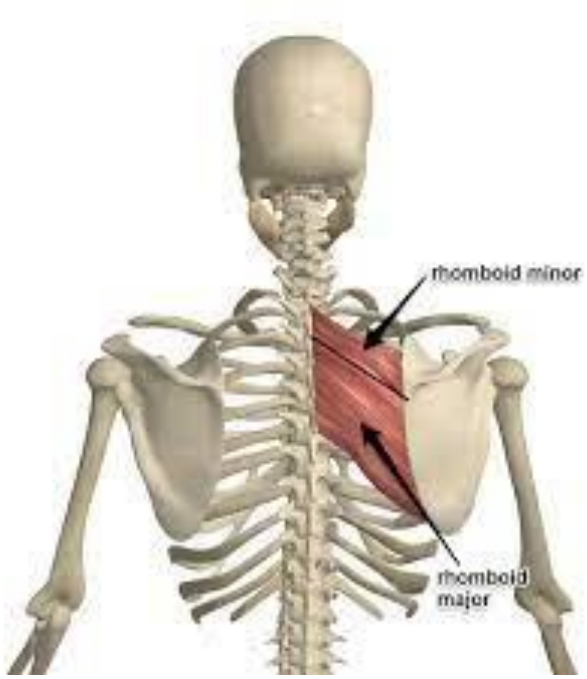
Upper trapezius

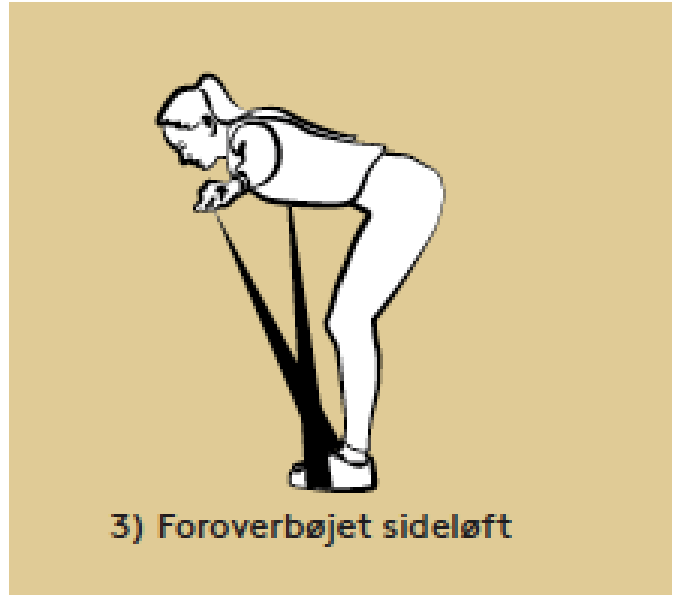


Deltoideus

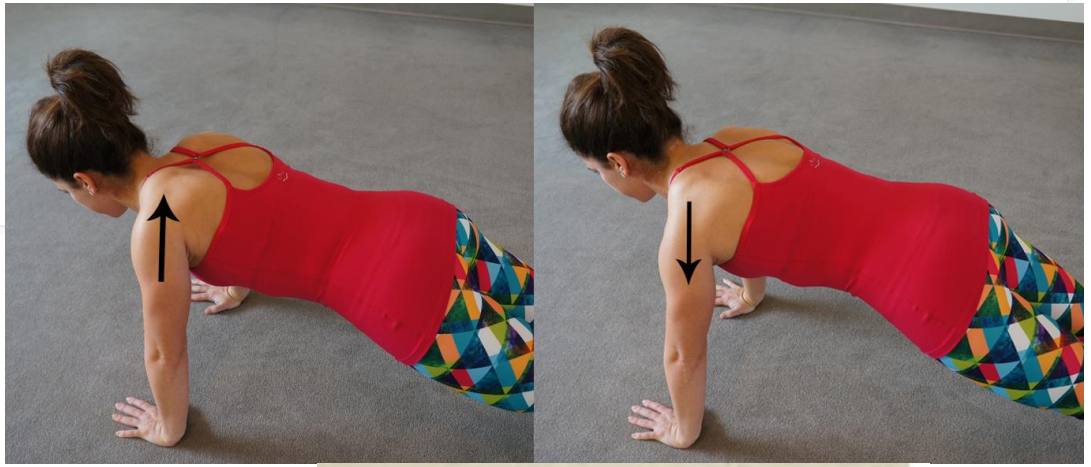

External rotation
Deltoid
Teres minor
Infraspinatus
Internal rotation
Deltoid
Pectoralis major
Teres major
Latissimus dorsi

Rhomboideus





Serratus anterior

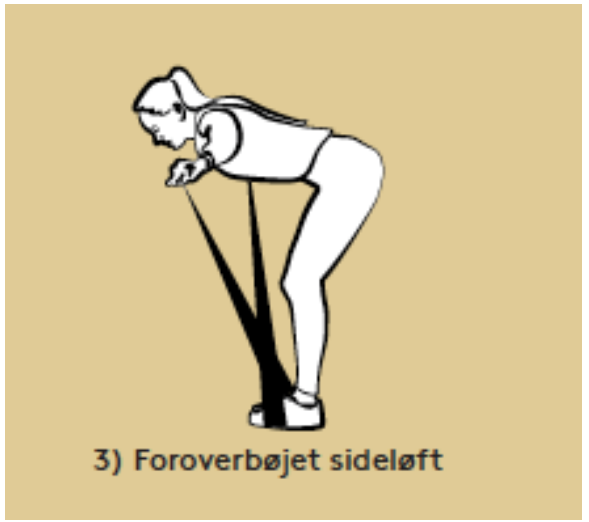


Four exercises (small break in between)

1

2

3



4

Load progression and Exercises

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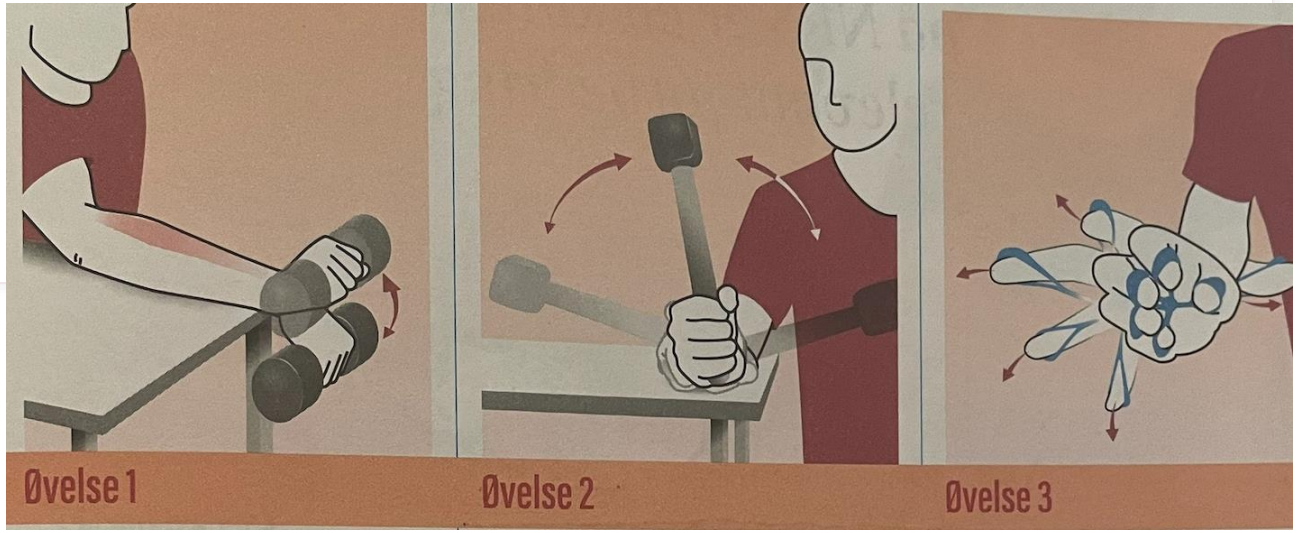
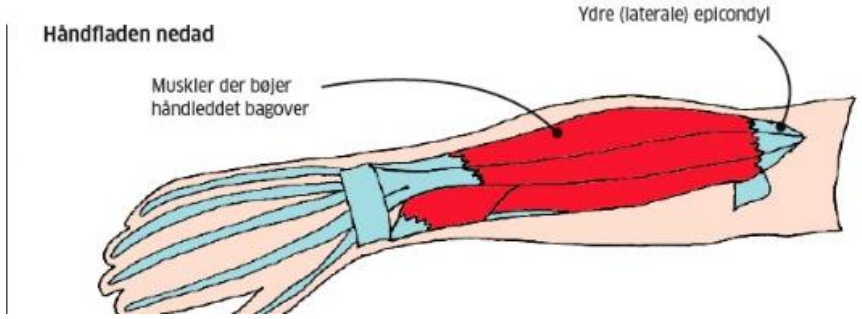


Lateral Elbow Tendinopathy



Acceptable pain 3-5 out of 10 when training

Links:

- https://artist-musikerhalsan.se/sv/musikerergonomi/3-ergonomiska-rad-for-specifika-instrument/3-1-ergonomi-violin-viola
- https://soundperformers.com/login/index.php
- Mark Phillips: www.musicianshandclinic.co.uk
- BAPAM: bapam.org.uk
- Nordic conference 2025, Denmark

Thank you for today!

Stephanie Mann

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SDU
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