

# EXERCISE OF THE WEEK 9

## MOBILISATION OF THE LUMBAR SPINE

Get fit at work



**Office-Syndrom?**

Headache

Neck Pain

Shoulder pain

Backache

Dann hilft die Übung der Woche!

**KNSU** KOMPETENZNETZWERK SPORTUNTERRICHT

**AHS**  
Allgemeiner HochschulSport in Koblenz

Cooperative Project of AHS and KNSU

**Authors:** Frank Uwe Heinze, Caroline Richter

**Translator:** Philipp Hähle



## Overview

- **Exercise card week 9**
  - **Mobilisation of the lumbar spine**
    - Exercise 9.1: Pelvis tilt seated
    - Exercise 9.2: Pelvis tilt standing
  - **Videos**
    - Pelvis tilt seated (9.1)
    - Pelvis tilt standing (9.2)
- **List of references**

# EXERCISE CARD WEEK 9

## Mobilisation of the lumbar spine

### Exercise 9.1: Pelvis tilt seated

### Exercise 9.2: Pelvis tilt standing

#### Starting position/ SP - 1

- **Seated**

Sit on the edge of the chair.



9.1



- **Standing**

Keep your knee and hip joints in a slightly flexed position.



9.2



- 2 Actively tilt your pelvis forward.
  - While tilting forward (hollow back position) breathe in slowly.
- 3 Actively tilt your pelvis backwards.
  - While tilting backwards (round back position) breathe out slowly.



Actively tilting your pelvis backwards causes an increased activity of the lower rectus abdominis muscle against the force of gravity. Therefore, it requires more strength than tilting the pelvis forward, which is why we breathe out while tilting the pelvis backwards.

**3-5 sets with 8-10 repetitions**



9.1

# Pelvis tilt seated

 9.1	Sequence	Tips
<p><b>Function</b></p> <ul style="list-style-type: none"> <li>• Mobilisation of the lumbar spine</li> </ul> <p><b>Information:</b> <b>Tilting the pelvis backwards</b></p> <ul style="list-style-type: none"> <li>• Causes an increased activity of the lower rectus abdominis muscle against the force of gravity.</li> <li>• Therefore, it requires more strength than tilting the pelvis forward, which is why we breathe out while tilting the pelvis backwards.</li> </ul>	<p><b>SP</b> <b>EP</b></p>  <p>1</p> <p>2</p> <p>3</p> <p>3-5 sets with 8-10 repetitions</p>	<p><b>SP/EP</b></p> <ol style="list-style-type: none"> <li>1 Upright seated position at the edge of the chair. Your arms hang down loosely at the sides.</li> <li>2 Actively tilt your pelvis forward (hollow back) and breathe in slowly.</li> <li>3 Actively tilt your pelvis back (round back position) and breathe out slowly.</li> </ol>



## 9.2

# Pelvis tilt standing



### Sequence

### Tips

#### Function

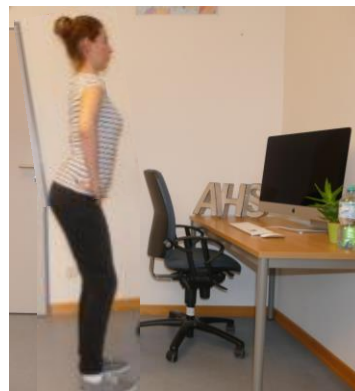
- Mobilisation of the pelvis

#### Information:

##### Tilting the pelvis backwards

- Causes an increased activity of the lower rectus abdominis muscle against the force of gravity.
- Therefore, it requires more strength than tilting the pelvis forward, which is why we breathe out while tilting the pelvis backwards.

SP  
EP



1



2



3

3-5 sets with 8-10 repetitions

#### SP/EP

- 1 Hip and knee joints are slightly bent.  
Your hands rest on the iliac crest.
- 2 Actively tilt your pelvis forward (hollow back) and breathe in slowly.
- 3 Actively tilt your pelvis back (round back position) and breathe out slowly.



## Right and wrong Pelvis tilt seated

### Right

- Movement is performed in the lumbar spine



### Wrong

- Movement is performed in the upper trunk



## List of references

### Illustrations/ images

Number	Creator
All pictures	Caroline Richter
Illustration: titel	www.colourbox.de (ID#18474676); modified by Jan-Holger Nahler

### Videos

Number	Creator
9.1/9.2	Caroline Richter / Sprecher: Frank Uwe Heinze

### German narration and music

Video	Narrator/ Composer	Track title
9.1/9.2	Frank Uwe Heinze	Enjoy the Moment

### Creators of the article

Author	Counsellor	Institution
Frank Uwe Heinze		Physiotherapist Institute for Preventive Medicine of the Bundeswehr/ Koblenz
Caroline Richter, Eva Keller/ students	Minnich, Marlis	Institute of Sports Sciences, University of Koblenz- Landau, Campus Koblenz
Jan-Holger Nahler	Bauer, Sabine	Head of the AHS, Universität Koblenz - Landau, Campus Koblenz

### Translation

Translator	Counsellor	Institution
Philipp Hähle/student	Mara Hammes /student	Institute of Sports Sciences, University of Koblenz- Landau, Campus Koblenz