

NEUROMUSCULAR TRAINING FOR STABILISATION OF THE CERVICAL SPINE

Level 1 – Basic Stability

1A. Lateral muscle stabilization with hand resistance

Initial position: Standing, upright position, double chin. Place the hand on one side of the head. Start in neutral position of the head.

Execution: Slightly push with the hand and resist with the head to disable movement of the head. Do not raise shoulders.

2x30 sec and 10 sec break.



1B. Anterior muscle stabilization

Initial position: Place the theraband under slight tension behind the head, hold it with both hands.

Execution: Make a double chin. Slowly "push" the head towards the theraband, the head makes a small movement.

3x10 sec with 10 sec break.



1C. Posterior muscle stabilization

Initial position: Lying on the stomach, mat. Arms lying sideways beside the body.

Execution: Slowly lift the head off. Do a double chin. Head remains in line with the spine.

3x10 sec with 10 sec break.



Level 2 – Functional Control

2A. Lateral muscle stretch with constant resistance

Initial position: Standing. Upright position. Take a theraband in both hands and hold it shoulder-width apart.

Execution: Move the theraband up and down while pulling the shoulder blades back.

2x10 sec with 10 sec break.



2B. Stabilization of the shoulder girdle

Initial position: Standing. Take a theraband in both hands and hold it shoulder-width apart.

Execution: Do a double chin stand and push the shoulder blades back and pull the theraband slightly apart.

2x10 sec with a 10-sec break.



Level 3 – Dynamic Integration

3A. Lateral muscle stabilization with theraband resistance

Initial position: Standing. Upright position. Place the theraband behind the head, hold it with one hand on the side and put it under tension.

Execution: Slowly do a double chin and, "push" the head toward the left or right, without moving the head. Switch sides for the next set. **2x10 sec with 10 sec break.**



3B. Rotational muscle stabilization

Initial position: Standing. Upright position. Place the theraband behind the head, hold it with both hands.

Execution: Put the theraband under slight tension. Move the arm outwards. Slowly do a double chin, and turn the head to the other side against the resistance of the theraband.

3x10 sec with 10 sec break.



3C. Posterior muscle stabilization with theraband resistance

Initial position: Lying on the stomach, mat. Fix the theraband with both hands.

Execution: Do a double chin. Put the theraband under tension behind the head. Slowly lift the head against the resistance (chest does not lift).

3x10 sec with 10 sec break.



Level Explanation:

- **Level 1:** static, low load, focus on posture/coordination.
- **Level 2:** functional posture + light movement/co-activation.
- **Level 3:** multiplanar/dynamic, defined resistance, rotations/anti-rotation (anti-movement).