# Ankle exercises for people with hemophilia

# **Exercise 1**

This exercise can be started as soon as bleeding has stopped.

- 1. Lie in a comfortable position.
- 2. Move your foot up and down, and in and out. Practice drawing shapes or letters with your foot while keeping the rest of your leg still.

Goal: Full ankle motion equal to your other ankle or baseline.

# Exercise 2

- 1. Sit with your knees bent and your feet flat on the floor.
- Slide your heel back as far as you can, keeping your heel down. You may feel pressure at the front of the ankle. Hold for several seconds, then relax. Repeat.
- **Goal:** Try to slide your heel back a little farther each time. Practice until full motion is restored. Compare with your other ankle or baseline.





## **Exercise 3**

Note: Do not attempt this exercise if you have swelling or pain in the ankle.

- 1. Stand facing the wall, with your affected leg slightly in front of the other. Place your hands on the wall and keep both feet pointing toward the wall.
- 2. Gently move your knee toward the wall while keeping your heel flat on the floor. Hold for several seconds, then relax. Repeat.
- **Goal:** Try to move your knee closer to the wall each time. Compare with your other ankle or baseline.

\*Including hemophilia with inhibitors.

Do not start any exercise program without first talking with your doctor or hemophilia treatment center (HTC) team. If a bleed occurs, stop exercising right away and start appropriate treatment.





#### **Exercise 4**

- 1. Sit with your knees bent and your feet flat on the floor.
- 2. Lift the front of your feet off the floor and hold for several seconds. Relax.

Goal: Repeat until your leg muscles feel tired.

#### **Exercise 5**

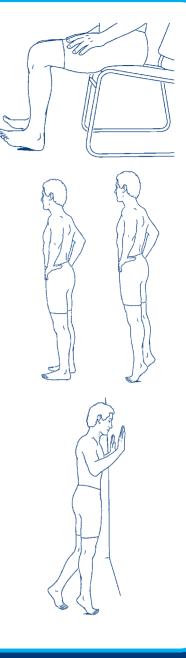
- 1. Stand with your weight on both feet.
- 2. Lift both heels and stand on your toes for several seconds. Relax.

Goal: Repeat until calf muscles feel tired.

### **Exercise 6**

- 1. Stand on your affected leg. Hold on to something for balance.
- 2. Raise your heel off the floor and hold. Relax.

**Goal:** 25 to 30 repetitions. Stop if you feel pain in your ankle during the exercise.



Do not start any exercise program without first talking with your doctor or HTC team. If a bleed occurs, stop exercising right away and start appropriate treatment.

This material was originally published by the World Federation of Hemophilia (WFH) in *Exercises for People with Hemophilia* and has been adapted and reprinted with permission. The WFH is not responsible for any inaccuracies in content different from the content of the original English edition. © 2006 World Federation of Hemophilia. Illustrations copyright of VHI, 1999.

For a complete list of exercises, visit wfh.org

🔆 printed on recycled paper

Novo Nordisk Inc., 100 College Road West, Princeton, New Jersey 08540 U.S.A.





# Elbow exercises for people with hemophilia

# **Exercise 1**

- 1. Sit with your elbow supported.
- 2. Extend your elbow slowly, letting the weight of your arm assist. Release your arm. Repeat several times.
- **Goal:** Move your arm farther with each repetition, but do not force the movement.

# Exercise 2

Do not attempt this exercise if you have swelling or pain in your elbow.

- 1. Sit with your elbow resting near the edge of the table.
- 2. Straighten your elbow as far as you can, assisting with your other hand.
- **Goal:** Complete extension. Compare with your other arm or baseline.

# Exercise 3

This exercise can be started as soon as bleeding has stopped.

- 1. Sit with your elbow bent and arm supported.
- 2. Turn your palm up, then down. Repeat several times.
- **Goal:** Turn palm without moving the rest of your arm. Turn your palm upward a little more each time, but do not force the movement.







\*Including hemophilia with inhibitors.

Do not start any exercise program without first talking with your doctor or hemophilia treatment center (HTC) team. If a bleed occurs, stop exercising right away and start appropriate treatment.





### **Exercise 4**

- 1. Place your strong hand under the affected arm.
- 2. Press the affected arm down into your strong hand and hold for several seconds. Repeat several times until your arm feels tired.
- **Goal:** Gradually increase pressure. Practice until the affected arm can exert pressure equal to your other arm.

#### **Exercise 5**

- 1. Sit, or lie on your back. Bend your elbow, placing your hand near your opposite shoulder, with your elbow pointing toward the ceiling.
- 2. Extend your arm and reach toward the ceiling. Hold for a few seconds, then relax. Repeat several times until the arm feels tired.

Goal: Practice until you can straighten your elbow completely.

### **Exercise 6**

- 1. Stand facing the wall. Place your hands flat on the wall with your arms out straight.
- 2. Lean toward the wall so your elbows bend. Return to the upright position by pushing with your arms and straightening your elbows.
- **Goal:** Start with small amounts of bending, and bend more only if you do not feel pain.

Do not start any exercise program without first talking with your doctor or HTC team. If a bleed occurs, stop exercising right away and start appropriate treatment.

This material was originally published by the World Federation of Hemophilia (WFH) in *Exercises for People with Hemophilia* and has been adapted and reprinted with permission. The WFH is not responsible for any inaccuracies in content different from the content of the original English edition. © 2006 World Federation of Hemophilia. Illustrations copyright of VHI, 1999.

For a complete list of exercises, visit wfh.org

📩 printed on recycled paper

Novo Nordisk Inc., 100 College Road West, Princeton, New Jersey 08540 U.S.A.

Changing Possibilities in Hemophilia<sup>™</sup> is a trademark of Novo Nordisk Health Care AG © 2009 Novo Nordisk Inc. Printed in the U.S.A. 138716D July 2009









# Knee exercises for people with hemophilia

# **Exercise 1**

This exercise can be started as soon as bleeding has stopped.

- 1. Sit with your legs out straight or lie on your back.
- Bend your hip and knee, and slide your heel toward your body. Then straighten your knee by sliding your heel away from your body. Repeat several times until your leg feels tired.
- **Goal:** Try to get the back of the knee as close to the surface as possible. Try to bend your knee as much as it could bend before the bleed.

# Exercise 2

- 1. Sit in a chair. Support the weight of the affected leg with the other leg, if necessary.
- 2. Allow your knee to bend as much as is comfortable, then straighten your leg as far as you can.

Goal: Try to bend a bit more each time.

## **Exercise 3**

**Note:** If you have difficulty lying on your stomach, it may be necessary to place a pillow under your waist so your hip is more comfortable or a pad under your thigh to take pressure off your knee cap.

- 1. Lie on your stomach.
- 2. Bend your knee and try to touch your heel to your buttock. Assist with your other leg, if necessary. Then straighten your leg as far as you can.

Goal: Bend your knee as much as it could bend before the bleed.

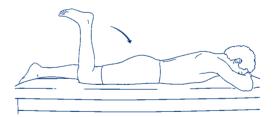
\*Including hemophilia with inhibitors.

Do not start any exercise program without first talking with your doctor or hemophilia treatment center (HTC) team. If a bleed occurs, stop exercising right away and start appropriate treatment.











### **Exercise 4**

This exercise can be started as soon as bleeding has stopped.

- 1. Lie on your back with a roll under your knee.
- 2. Tighten the muscle at the front of your thigh, extend your leg, and lift your heel. Hold for several seconds, then relax. Repeat until your muscle feels tired.
- **Goal:** Straighten your leg completely or as straight as was possible before the bleed. Compare the affected knee with your other knee or baseline.

#### **Exercise 5**

- 1. Sit with your knees bent.
- 2. Extend your leg, lifting your foot off the floor as far as you can. Hold for several seconds, then slowly return your foot to the floor. Repeat until your muscle feels tired.
- **Goal:** Straighten your leg completely or as straight as was possible before the bleed. Increase repetitions. Compare the affected knee with your other knee or baseline.

#### **Exercise 6**

- 1. Sit in a chair. Cross the ankle of your uninjured leg over the ankle of the affected leg.
- 2. Press your ankles together as hard as you can. Hold for several seconds, then relax. Repeat with your knee bent at different angles until your muscles feel tired.
- **Goal:** Straighten your leg completely or as straight as was possible before the bleed. Continue until your affected leg can exert strong pressure, equal to your unaffected leg.

Do not start any exercise program without first talking with your doctor or HTC team. If a bleed occurs, stop exercising right away and start appropriate treatment.

This material was originally published by the World Federation of Hemophilia (WFH) in Exercises for People with Hemophilia and has been adapted and reprinted with permission. The WFH is not responsible for any inaccuracies in content different from the content of the original English edition. © 2006 World Federation of Hemophilia. Illustrations copyright of VHI, 1999.

For a complete list of exercises, visit wfh.org.

📸 printed on recycled paper

Novo Nordisk Inc., 100 College Road West, Princeton, New Jersey 08540 U.S.A.

Changing Possibilities in Hemophilia<sup>™</sup> is a trademark of Novo Nordisk Health Care AG. © 2009 Novo Nordisk Inc. Printed in the U.S.A. 138716B July 2009









