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Assistive Technology: Foldable Shower Seat

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Mission & Population

The goal of the foldable shower seat is to reduce the efforts required for showering, targeting individuals with circumstances that reduce their energy levels so they can reserve energy to carry out other meaningful activities.

Population:

- Older adults
- Individuals recovering from injuries
- Individuals with permanent disabilities



Device

The foldable shower seat comes in different shapes and sizes, the purpose of the variety is to provide an assistive technology that is client centered and appropriate for different bathrooms. Below are two examples of ADA compliant shower seats



Phenolic Solid WHITE
250 lbs weight capacity
26" x 22½"



Phenolic Slatted TEAK
250 lbs weight capacity
24" x 15"

(Freedom Showers, n.d.-a; n.d.-b)

Price Range & Comparison

Range from \$150-\$500

Companies:

- [Freedom Showers](#)
- [Restroom Direct](#)
- [Harney Hardware](#)
- [Grab Bar Specialists](#)

Energy Conservation



The aim of energy conservation is to improve quality of life by conserving energy for the activities a client likes to do as well as those they have to do within a safe and well structured environment.

- Reduce the consumption of energy
- Adapt daily activities
- 6 P's:
 - Prioritize
 - Plan
 - Positioning
 - Pace yourself
 - Positive attitude
 - Pursed lip breathing



Spoon Theory

The Spoon Theory is used to describe the idea of limited energy, using "spoons" as a unit of energy.



If a person started out with 10 spoons, he/she might not have enough spoon to get through the day to complete all the activities. With the use of this AT, it can reduce the amount of "spoons" needed for showering!

Occupational Impact

Showering/bathing:

Bathing and showering is one of the **Activities of Daily Living (ADL)** under the Occupational Therapy Practice Framework (OTPF) 4

- Obtaining and using supplies; soaping, rinsing
- Maintaining bathing position
- Transferring to and from bathing positions

Sustaining performance:

- Endurance- persists and completes the task without demonstrating physical fatigue, pausing to rest, or stopping to catch breath
- Paces- Maintains a consistent and effective rate or temp of performance throughout the entire task performance

Physiological changes:



Shower temperature:

- Hot showers increases blood pressure and heart rate

Prescription and nonprescription medicines can make you light headed or affect your balance.

- **Examples of medications:**

- Antibiotics
- Blood pressure medicines
- Medicine used to treat depression and anxiety
- Pain medicines
- Medicines used to treat cancer (chemotherapy)

Cause of dizziness:

- **Orthostatic Hypotension symptoms:**

- Feeling lightheaded or dizzy after standing up
- Blurry vision
- Weakness
- Fainting (syncope)
- Confusion



Strategies for shower safety:

Medication

- Know side effects of your medication and don't take blood pressure medication before showering

Water Intake

- Drink one glass of water before shower to help lower blood pressure

Blood Pressure

- Check your blood pressure before showering (normal = 120/80 mmHg)



Recovery from Orthostatic Hypotension

- Stop moving immediately and then sit down until symptoms subside

Social/Community Implications

Community Implications:

- Proper Installation
 - Decrease risk of injuries
- Moisture/Mold
 - Wall studs
 - Preventable with waterproof sealants
- Materials/Budget
 - Bamboo/ Marble/ Granite
 - Sizing
- Family Usage
 - Universal Design



Social Implications:

- Increases an individual's independence
- Discrete

Installation

Installation Requirements:

- Experienced carpenter
- Strong wall support
- Tools
 - Electric drill, punch, measuring tape
- OT can provide a valuable role



Installation Process:

- After wood blocking is placed and the wall finish has been installed, the shower seat can be mounted
- Height 17-19 inches above floor (depending on user height)
- Mark flange and wall bracket screw locations
- Use punch hammer to nick tile
- Use masonry bit and drill to anchor hardware
- Secure shower seat to wall
- Test the seat to make sure it is secure



References

- All Terrain Medical (n.d.) 5 advantages of owning a shower or bath chair. (n.d.). Retrieved from <https://www.allterrainmedical.com/5-advantages-of-owning-a-shower-or-bath-chair/>
- Blahd, W. H. (2020, February 26). Medicines that may cause lightheadedness or vertigo. Retrieved November 29, 2021 from <https://www.uofmhealth.org/health-library/sig53527>
- Freedom Showers. (n.d.-a). 24" x 15" Folding Shower Bench, Phenolic Slatted TEAK. https://www.freedomshowers.com/APFSSB-240150PT?gclid=Cj0KCQiAhf2MBhDNARIsAKXUSGQb_hWsnif6ezg7-KRcuhwGutWf6vxEUNq9e-5VCQO1S1Po1Z27-PGYaAqyHEALw_wc
- Freedom Showers. (n.d.-b). 26" x 22½" ADA Reversible Shower Seat, Wall Supported, Phenolic Solid WHITE. <https://www.freedomshowers.com/Shower-and-Bath-Seats/Wall-Supported-Shower-Seat/APFS LR-260225PWS>
- Grab Bar Specialists, Inc. (2021). *Folding shower seat installation*. Retrieved November 27, 2021 from <https://www.grabbarspecialists.com/seat-installation.php>
- HomeXchange.sg. (n.d.). Drinking water at the right time. Retrieved November 28, 2021 from <https://www.healthxchange.sg/food-nutrition/food-tips/drinking-water-right-time>
- Mayo Clinic. (2020, October 27). Orthostatic hypotension (postural hypotension). Retrieved November 29, 2021 from <https://www.mayoclinic.org/diseases-conditions/orthostatic-hypotension/symptoms-causes/syc-20352548>
- National Health Service. (2012). Occupational therapy energy conservation booklet. Retrieved from <https://www.bfwh.nhs.uk/>
- Prevention. (2019, June 10). Feeling lightheaded? 19 ways to treat dizziness. Retrieved from <https://www.prevention.com/health/a20428919/feeling-lightheaded-19-ways-to-treat-dizziness>
- Schultz, K. (2019, April 19). *What is spoon theory?* Healthline. Retrieved November 30, 2021, from <https://www.healthline.com/health/spoon-theory-chronic-illness-explained-like-never-before#1>