







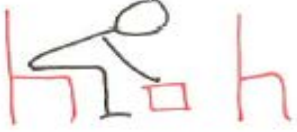
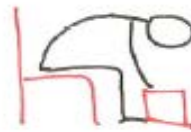


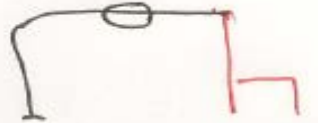
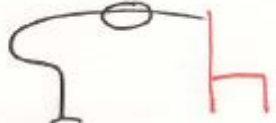


















AMERICAN BONE HEALTH YOGA SEQUENCE

 <p>Tadasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Stand with feet hips width apart and legs engaged • Postural alignment changes load through the bone to protect against progressive kyphosis (dowager's hump)
 <p>Talasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Stand behind chair in Tadasana and lift one leg off floor at a time • Emphasize postural alignment while balancing on one foot • Standing postures stimulate bone formation in the neck of the femur (hip) and prevent falls.
 <p>Hasta Padangusthasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Reach arms toward chair in front of you and press hips back into seat and feet into floor • Rationale: Practicing bending from the hip instead of rounding the back prevents fractures and compressive forces in the spinal vertebrae.
 <p>Utthita Eka Padasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Raise right arm overhead and lift left leg keeping knee bent • Page 18 - Avoid all forms of crunches, instead practice core control by drawing in abdominals as you bring one leg at a time to a 90 degree angle and press lower back down. Alternate touching toes to the floor. • Supports and lengthens the spine and indirectly prevents fractures.
 <p>Utkatasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Sit on edge of chair with feet wider than hips width, knees bent forward and back straight, chest lifted • Reach down for block and lift block up to chest and release • Page 7 -12 Unpacking Groceries, Lifting a Pet, Brushing Teeth, The Dishwasher, The Oven • Lifting correctly without rounding the back prevents fractures and minimizes the excessive loads through the spinal vertebrae.



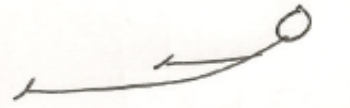

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 <p>Utthita Hasta Padangustasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Draw legs in one at a time with exhale, inhale and stretch leg out • Page 18 • Reduces compressive forces on the spine by increasing the mobility at the hip.
 <p>Adho Mukha Svanasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Stand behind chair holding back bar • Step feet back and press hips back over heels to stretch spine • Keep belly engaged and emphasize spinal traction • Excellent shoulder and upper back extension stretch that prevents the progressive kyphosis or rounding of the upper back.
 <p>Virabhadrasana I</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Stand behind chair holding back bar • Step right foot forward and left foot back • Bend right knee and lift heart forward
 <p>Virabhadrasana II</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Builds bone by loading the neck of the femur and promotes awareness of the alignment of the feet, knees and hips. Avoid Warrior 1 due to the likelihood of collapsing the inner arch of the foot and excessive force upon the ligaments of the inner knee.
 <p>Virabhadrasana III</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Stretches the hip into extension and stimulates bone formation by loading the neck of the femur. Promotes awareness of the alignment of the feet, knees and hips and good balance for fall prevention.

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 <p>Trikonasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Loads the neck of the femur bilaterally and strengthens the trunk muscles which may also facilitate bone formation in the spine. Also promotes and challenges balance for fall prevention.
 <p>Ardha Matsyendrasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Sit with feet and knees hips width apart. Inhale lift arms overhead and exhale twist to right with left arm crossed over right knee, repeat other side • Page 16 – When checking behind, reach right hand behind passenger headrest and brace yourself and keep chest lifted as you rotate • Promotes awareness of the spine in twisting positions in daily life. If the spine is lengthened and supported during a twist fracture risk is minimized.
 <p>Purvottanasana</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Sit in chair and hold sides of chair seat, feet are slightly forward with toes slightly turned in. Inhale and swing hips forward as you press hands into chair and lift chest forward, exhale to release • Page 20 – Avoid yoga forward bend, instead do seated chest stretch supported by arms • Stretches the upper body and chest to decrease kyphosis, strengthens the hips and may facilitate bone formation in the neck of the femur.
 <p>Sidestepping</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Stand behind chair in Tadasana and step feet to side and together • Emphasize abductor and adductor strength for balance
 <p>Washing the Dishes</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Stand behind chair holding back bar • Step right foot forward onto block and press hips back • Page 13 – Open the door of the cabinet under your sink and place your foot on the edge of the cabinet floor. Lean against the sink keeping your spine straight to avoid rounding your back over the dishes

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 <p>Postural Strengthening</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • From all fours, inhale raise right arm parallel to floor, left leg behind you parallel to floor • Exhale to release and repeat to other side • Page 21 – Avoid yoga Cat and all rounded back stretches, instead practice opposite arm and leg raises to strengthen upper back and hips
 <p>Spine Strengthening</p>	 <p>Not Like This!</p>	<ul style="list-style-type: none"> • Lie on belly with arms to sides, inhale to lift chest and arms off floor keeping toes pointed back • Page 22 – Avoid yoga plough and shoulder stand, instead o yoga cobra

Other Bone Healthy Asanas:

1. Surya Namaskar A (Sun Salutations modified):

Rationale: Excellent and dynamic series that stimulates bone in the spine, the hip and the wrists. Avoid the rounded back forward bend position just before the jump to Chaturanga.

2. Chaturanga Dandasana (Yoga Plank/Push Up):

Rationale: Excellent for core control and upper body strengthening

3. Urdhva Mukha Svanasana (Updog):

Rationale: Good position for prevention of progressive kyphosis, extends the spine and strengthens the upper body.

4. Shalabhasana (Locust with pillow under ribs and pelvis):

Most relevant pose for stimulating bone in the spinal vertebrae. Very similar to the position in Sinaki's studies on spinal extension exercises.

5. "Bird Dog" (Quadruped, Arm and Leg Reach):

Not a yoga pose, but this exercise is excellent for reducing kyphosis, strengthening the core, the back and the gluteal muscles that extend the hip.



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