

The Older Adult

- I. Who?
 - A. Federal Definition vs. AARP
 - 1. Federal Government defines the Older Adult as being any body over the age of 40.
 - 2. AARP definition is 50 years
 - 3. Easy to conclude there is no set standard
 - 4. The (Older) **mature** adult is defined as...
The individual who has reached the stage of life known as *Self-Actualization* , I.E. the period of life where they are beyond in the normal child bearing years and looking towards relaxation/retirement/realization of life goals. Examples of Self Actualizing behaviors are...
 - a. Creative expression
 - b. Quest for spiritual enlightenment
 - c. Pursuit of knowledge
 - d. Desire to give to society
 - B. Chronic Conditions
 - 1. Persons with chronic **manageable** conditions will also fit into this category
- II. attitude changes
 - A. Self Aware
 - 1. More Opinionated
 - 2. More Particular
 - 3. More open with opinions
 - 4. More concerned with Health
 - 5. More...so
 - B. Prime concerns of the Mature Adult
 - 1. Mobility
 - 2. Range of motion
 - 3. Balance
 - 4. Functional movement
 - 5. Stamina
 - 6. Cardiac Health
 - 7. Independence
- III. physiological concerns of the Mature Adult
 - A. Pain
 - 1. Cessation, Reduction and management
 - 2. Qualities and types of pain-
 - a. generalized heat
TYPE ONE- *inflammatory*, due to chronic irritation or insult/illness/imjury
TYPE TWO- *circulatory* restoration, due to reactivation of flat or deactivated tissues
 - b. triggerpoint-Caused by *Synergistic Overload, Repetitive Motion Injury* or *Postural Compensation*
-ST/LS/Rh/SuSp/SubScap *triggerpoint* is the most common
-C3 process
-triggerpointmaps.com

c. shooting-MAJOR CONCERN—STOP IMMEDIATELY—this is caused and Only caused by pressure on the nerve itself-either at the root of the nerve at the facet joint where it comes out from the spine, or at a triggerpoint location.

When this travelling sensation occurs, it is MOST IMPORTANT TO STOP activity and seek consult with a qualified medical medical professional.

d. Neuropathic/paraesthetic- these come from either neurologic disease or traumatic nerve damage such as

- burns
- crushing
- stroke
- TIA
- MS
- Transverse Myelitis
- Encephalitis

The only treatment available for this type of pain, reputed to be the worst the body can bear, is activity. *There is a relationship that exists between neuropathic pain and Cardiomyopathy*

B. Mobility

1. Restoration
 - a. Upper body-Carry/reach/hold/pull/push
 - b. Lower body-stand/sit/walk/lie/roll
2. maintenance

C. Range of motion

1. Restoration
 - a. Neck
 - b. Shoulder
 - c. Back
 - d. Hip
 - e. knee
2. maintenance

D. Balance

1. Restoration
 - a. Postural realignment
 - b. Walk correction
2. maintenance

E. Functional Movement

1. Rolling Side to Side
2. Getting up/down off of floor
3. Standing
4. Sitting
5. Walking
6. Climbing stairs
7. Reaching

F. Stamina

1.Functional Stamina

- a. Shopping
- b. Cleaning

- 2. Quality of Life
 - a. vacations
 - b. classes
 - c. museums
 - d. shows
- IV. behavioral differences- open discussion
 - A. Not in Workforce
 - 1. Hygiene
 - a. Functional issues, i.e., excessive protrusion may cause difficulty in raising the arm/increase in gagging reflex, making brushing of the teeth and hair painful.
 - b. Hormonal issues, i.e., natural hormonal loss reduces the ability in many to smell or produce essential body acids/oils/sebum/mucus. This makes 'self-checking' difficult, and we see increases in eczema, psoriasis and related skin conditions as well as odor issues(dragon breath)
 - 2. social health
 - a. increase in pain leads to increased isolation/depression
 - b. loss of long term friends to illness/death
 - 3. physical health
 - a. long term inactivity
 - b. mental health
 - 4. Mental health
 - a. managed mood/mental disorders often go into transition once the client is out of the work force
 - b. many with conditions that were managed cease management once they are out of the workforce
 - B. Self Actualized
 - 1. More Open with Opinions
 - 2. More indulgent
 - C. Behavioral Management
- V. 'tells'
 - open discussion

Safe Cardio techniques

- I. Peripheral Heart Action-Upper body/Lower Body alternating
 - A. Energy Maintenance
 - 1. Constant drops in energy while 'explaining' an exercise, will produce a negative effect. Rule of thumb: If you must stop to explain the exercise, then the exercise doesn't belong with the group you are working.
 - 2. Many clients wish to extend their stamina, and will self check.
 - B. 'Bit' Formatting
 - 1. "bit"=5 minutes or less. In other words, the same amount of time you would give to a ten-year-old.
 - 2. Maximizes concentration and compliance
 - C. VO2 Max
 - 1. Maximizing the usage of the blood flow after the warm up enables the client to better appreciate and maintain relative flexibility, if not strength.

2. Studies have shown that even increased elasticity of muscle will increase oxygen uptakes
- II. Sequence Training(e.g., Latin Arms)
 - A. Mind/body cardio
 - B. Proprioceptive reframing
 - C. Brain Fog reduction
- III. part to whole(e.g., Heel toe waltz)
 - A. Mind/Body
 - B. Sense of Accomplishment
- IV. Rehearsal(e.g., Macarena Arms)
 - A. Mind/body
 - B. Sense of accomplishment
 - C. *'Smile' effect

**Positive Neuropathic Response and the Rhesus Sardonicus Effect-* a 'positive neuropathic response' can be many things. It can be the rolling of the shoulder or the tilting of the head side to side after Peripheral Restorative Exercise(PRE), or the cough after a chest opening exercise, or the wiggle of the hips after work on the lower back. RHESUS SARDONICUS, or 'monkey smile', is a release of all but three muscles in the face, something that occurs when the lower back releases its pain. When this occurs, endorphins are released into the frontal lobes of the brain. Look for this in your classes. You will see this often.

And remember- repetition, repetition, repetition- Many older individuals have altered proprioception. Memory issues occur mostly from chronic pain and stiffness, not from dementia or Alzheimer's. Lucidity generally returns with normalized blood flow. Repetition ensures success, which will ensure compliance, and the returning of your clients!

Functional movement

- I. Shoulder issues-from frozen/impacted/torn
 - A. Action of Shoulder Girdle
Bells/cups/circles
 - B. Basic rule is to 'work the shoulder to death? Why or why not?
 - C. Progression of exercises
 1. Articulation Stretches
 2. Range-of-Motion(ROM) exercises-may be same as 1.
 3. Light Resistance
 4. Active Stretch
 5. Prohibitions
 - a. Excessive overhead actions
 - b. stretching
 - c. Resting between exercises
 - D. Prohibitions
 1. Neck Circles
 - a. Plaquing
 - b. Neural impingement
 - c. Echo pain disorder
 2. PNF
 - a. Neural Impingement

- b. Echo pain disorder
 - c. Placement in workout order
- II. Hip issues-from replacement/fusion/sciatic
 - A. Function of the Ball Joint
 - B. Standing Start/safe Sit
 - C. Side to side and pelvic support actions
 - D. Prohibitions
 - 1. Forward bend wo/support
 - 2. Side bend wo/support
 - 3. Midline crossing of the knee- radical 'old-school' replacement vs. modern
- III. Leg issues-from toes/foot/knee
 - A. Step Reflex
 - 1. Oldest reflex in body
 - 2. Reasons for avoidance
 - a. Plantar Fasciitis
 - b. Hammer Toe
 - c. Bunion
 - d. Clubbing
 - 3. Reasons for recovery
 - e. Longer Stride
 - f. Reduction of impact
 - B. Function of foot
 - 1. Heel
 - a. Launches
 - b. Lands
 - c. Does NOT bear weight
 - 2. Metatarsals
 - d. Weight bearing
 - e. Coil
 - 3. Big toe
 - f. Springboard
 - g. Seat of Step Reflex
 - C. Function of Knee
 - 1. Balance Center
 - 2. Center of turning radius
 - 3. Prohibitions
 - a. Pushing on joint
 - b. Bouncing joint
 - c. Turning on straight joint

Functional Restoration

- I. Foot roll(heel resistance)
- II. Parallel feet
- III. Knees together
- IV. Settle of the hip
- V. Acromial process(counterlever of Scapulae)
- VI. Head/neck rotation-axis and atlas

Cueing concepts

- I. sample from Group Ex Pro-what is missing?

Pre-warm up warm up :-) Announcements, greetings.

A. *General warm up: e.g.*

1. *walk around, vary the steps and directions*
2. *joint mobilization, all major joints*
3. *breathing exercise, gentle stretches for major muscles*

B. *Postural exercises: e.g. any back strengthening exercises*

C. *Balance exercises: e.g. balance on one leg*

D. *Strengthening with light weight or body weight for arms and legs: e.g.*

1. *bicep curls, tricep extension, squat, leg lifts*
2. *can use wall for wall sit, wall push up, leg lifts*
3. *sometimes include finger exercises*

E. *Floor exercises for core: e.g. abs, back extension*

F. *Stretch exercises on the floor*

II. ALL cueing and programming –nothing is GENERAL

- A. must be specific and coordinated for maximum blood flow through joints
- B. Opt ALWAYS for active stretch and Stabilization over Static Stretch and PNF
- C. Active balance exercises(i.e. side steps, cariocas, cuban rocks, side squats)
maximize success over static balance exercises
- D. Back Strength best done on floor
- E. Cue ALL getting up and down
- F. Wall sits, deadlifts are counterproductive due to arthritic and replacement issues

III . Why? is as much or MORE important than technique in terms of compliance

Breathing correction/cueing/alternate breathing patterns

A. The old concepts

1. *No pain no gain*-this comes from the early days of fitness. We now know that pain is an indicator that something is WRONG
2. *Blow on exertion*-this comes ,again, from the old days when everybody had a tight Chest. In many cases, blowing on exertion actually causes the the Acromion to Disarticulate. Let the breathing follow the function, i.e., 'if the hands go above the head, the ribs will rise, so inhale'....

B. The new concepts

1. The qualities of pain
2. Form follows functional breathing

C. Pacing and Energy flow

1. Constant
2. Moderate cardio

Exercise Prohibitions-why?

- I. neck Circles(plaquiring/TMJ/nerve damage)
- II. excessive overhead extensions(Cardio/BP/Nerve Impingement)
- III. PNF vs active stretch(as above)
- IV. Tricep dips(protraction, increasing risk of tear)
- V. Forward bending(sciatica/hip replacement/stenosis)

Sample templates –set up in column form for required vs. selected modalities

Subject of the day

- I. Resource sharing for facility

Active Essentials

Stretch Basics I

Lite n' LivelyII. Program building for membership

III. Body Part or Health Management skill