

# Feed the Exercise: Nutrient Timing For Seniors



- Elderly digest and absorb protein slower
- Pre-workout: Complex carbs
- Pre-workout: Consider caffeine or cocoa
- Immediate feeding post workout is more beneficial: simple carbs plus protein

#### **Active Seniors & Protein Intake**



- Total caloric intake tends to decrease with age
- While calories decrease need for micronutrients do not
- Post- resistance training the elderly needed to consume 50 grams of protein to absorb what a younger person could with 20.
- Emerging trend: Protein should make up 15-20% of daily caloric intake

### **Preventing Dehydration**

- Drink 64 ounces of fluid per day
  - Dehydration mimics the symptoms of dementia
- Tests show that people consume more water when it is flavored



#### **Causes of Dehydration:**

Increases Fall Risk, Decreases Cognition

- Illness:
  - Especially vomiting, diarrhea
- Alcohol
- High sodium diet
- Insufficient water intake
- Getting overheated
- Medications

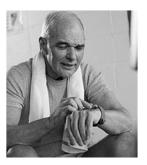


## **Twelve Signs of Dehydration**

- Constant fatigue
- Dizziness/Confusion
- Muscle cramps
- Wascie cramps
- Rapid heart rate
- Light-headedness
- Constant thirst
- Always feeling hot
- Dark yellow urine
- Constipation
- Constant thirst
- Dry eyes, dry mouth
- Inelastic skin

#### "No Time" to Work Out?

- One of the biggest barriers to participate in exercise is no time.
- Many assume that if you can't exercise for 60 minutes it's not worth it
- But -- Something is better than nothing & less may well be more!



#### Why Use Shorter Workouts?

- Improve mobility and range of motion
- · Increasing frequency
- Travel workouts
- Perfecting movements
- · Add intensity



#### Minimum Effective Dosage



- If "exercise is medicine" is it possible to over- or under-dose?
- What is the least amount of effort that will yield results?

## **Program Considerations**



With increased intensity comes increased risk of injury; proper screening and assessment is vital

Client must have a baseline of fitness PLUS high level or motivation

Proper progression is vital; progression is not always a linear ascent

If outdoors, factor in environmental factors

#### Three Vital Program Design Tips



- Allow for an appropriate warm up; insufficient warmups limit intensity
- Allow for sufficient rest between work intervals; incomplete or inadequate rest limits the peak intensity of the subsequent intervals
- Encourage proper nutrition & hydration before, during and after the workout.

A Dozen Practical Exercises for Seniors		
10 sec 1-legged stands	Chair Squat	
TVA activator with Kegel	Deadlift	
Pallof press	Walking lunges	
Med ball slams	Clock lunges	
Horizontal row	Lateral shuffles	
Decline chest press	Toe scrunch	

## The Best Resistance Equipment for Seniors

Body weight

Elastic tubing

Kettlebells

Med balls

Cable machines

Slosh pipes, sand bags



## Strength & Conditioning for Seniors: Try an Exercise Complex

- A complex is a series of complementary exercises performed sequentially with minimal rest between sets.
- You can design a complex around a:
  - Piece of equipment (monster band)
  - Body part (hips and thighs)
  - Movement (squat)
     Fitness goal (fall)
  - Fitness goal (fall prevention)



#### Benefits of Exercise Complexes



- · Ease of set-up
- Minimal equipment needs
- Excellent time management
- Adaptable for individual clients or groups
- Puts less stress and repetitive stress on older joints
- Targets different sections of the muscle
- Metabolic conditioning effect

### **Equipment? Location?**



- Use whatever you have on hand:
  - Body weight, elastic resistance
  - Dumbbells or kettlebells
  - Med balls, slosh pipes, sand bags, buckets
  - Chairs, tables
- Use complexes in boot camp, 1 on 1 training, group fitness classes
- They are suitable in both gym and non-gym environments

#### **How To Use Complexes**

- 1. Use in place of cardio for interval training
- 2. Use as a conditioning tool for functional training
- 3. Use as a quick workout when time is an issue
- 4. Teach your client to do these solo on "off" days or while traveling
- 5. Use to finish off your normal workout routine
- 6. Great way to alleviate boredom
- 7. These are routines your client would never think of on their own

#### **Program Design Recommendations**

- · Order exercises in a logical manner
- Exercises should seamlessly flow into each other for easy and quick transition
  - Can't waste time setting up next activity or hunting for equipment
  - No mindless small talk between sets or rounds
- Rep range depends on goals but due to intensity of complexes stick to 6-12 reps and 2-6 sets.
- Use weight that is appropriate for the weakest exercise.
- Only use exercises you are familiar with.
- Rest as appropriate between sets.

The Dynamic Warm Up Complex Complete 1 – 3 rounds. Rest as needed. .

Exercise	Sets	Time
Fast walk	1	30 sec
Leg pendulums	1	30 sec
Arm pendulums	1	30 sec
Structured ball slams	1	60 sec

Arm & Leg Pendulum





Structured Ball Slams



Chair Cardio Complex

Complete 1 – 3 rounds. Rest as needed.

Exercise	Sets	Time
Mountain climbers	1	30 seconds
Squat thrusts	1	30 seconds
Jumping jacks	1	30 seconds
Burpees	1	30 seconds

Chair Squat Thrusts, Burpees







Chair Mt. Climber, Chair Jacks





### Cardio Core Complex

No rest between sets, 30 seconds rest between rounds. Complete 1 – 3 rounds. Rest as needed.

Exercise	Sets	Time
Chair mountain climbers	1	30 seconds
Resisted MB slams	1	30 seconds
Farmer's walk (left side)	1	30 seconds
Resisted squat & toss	1	30 seconds
Farmer's walk (right side)	1	30 seconds
Resisted MB chest pass	1	30 seconds

Chair Mt. Climber, Chair Jacks





**Band Resisted Slams** 





Squat & Toss; Unilateral Farmer's Walk





**Agility Complex** 

Complete 1 – 3 rounds. Rest as needed.

Exercise	Sets	Time
Box drill	1	60 sec
Forward ladder drill	1	60 sec
Senior twister	1	60 sec
Lateral ladder drill	1	60 sec
"Herding cats"	1	60 sec

**Herding Cats** 



## Monster Band Pectoral Complex Complete 1 – 3 rounds. Rest as needed.

Exercise	Sets	Time
Tubing horizontal chest press	1	30
Tubing incline press	1	30
Tubing decline press	1	30
Tubing flye (each side)	1	30
Wall Med Ball Push-ups	1	30

#### **Monsterband Decline Press**





## Monster Band Back Complex

Complete 1 – 3 rounds. Rest as needed.

Exercise	Sets	Time
Standing horizontal row	1	30
Standing lat sweep	1	30
Bent over row	1	30
Standing upright row	1	30

## **Monsterband Row**





## **Deconstructed Burpee Complex**

Complete 1 – 3 rounds. Rest as needed.

Exercise	Sets	Time
Chair squat thrust	1	30 sec
Chair push-ups	1	30 sec
Squat to heel lift	1	30 sec
Full burpees	1	30 sec

## **Lower Body Complex**

Complete 1 – 3 rounds. Rest as needed.

Exercise	Sets	Reps
Walking lunges	1	30 sec
Monster band deadlift	1	30 sec
Chair squats	1	30 sec
Band resisted hip extension	1	30 sec
Donkey kicks, alt legs	1	30 sec
Lateral monster walks, each side	1	30 sec

## Fall Prevention Complex #1

Complete 1-3 rounds. Rest as needed.

Exercise	Sets	Time
Toe Scrunches	1	30 sec
Heel lifts	1	30 sec
Chair squats	1	30 sec
Walking lunges	1	30 sec
Hamstring curls	1	30 sec

## **Standing Hamstring Curls**





#### Fall Prevention Complex #2

Complete 1 – 3 rounds. Rest as needed.

Exercise	Sets	Time
Rolled up yoga mat	1	30 sec
Airex pad	1	30 sec
Balance disc	1	30 sec
Bosu ball (dome side up)	1	30 sec
Wobble board	1	30 sec

Start just by standing on each object. Progress to challenges such as playing catch, batting a balloon; controlled pushes and pulls or 1-legged stands.

## **Fall Prevention Complex**



## "Just for Fun" Complex

Complete 1 – 3 rounds. Rest as needed.

Exercise	Sets	Time
Cup catching	1	60 sec
Beer pong	1	60 sec
Balloon ping-pong	1	60 sec
Senior twister	1	60 sec
"Fetch"	1	60 sec

#### **Cup Catching Drills**

For balance, core strength, hand /eye coordination, weight shifting.

- Bounce a tennis ball on the floor, catch it in the cup.
- Bounce the tennis ball two or three times, catch on last bounce.
- Throw ball against wall & catch in the cup



## Beer Pong, Balloon Ping-pong





Senior Twister:
"Right Foot Purple, Left Foot Green!"



"Fetch"!



#### "Microburst Workouts"

High intensity, short duration & very effective

- More effective time management
- For busy executives
- While traveling
- Any time when time is limited
- Burn fat more effectively
- Increase muscle development & bone health
- Improve athletic performance
- To situationally add intensity



#### 4-Minute Complex

Complete 2 rounds. Rest as needed.

Exercise	Work	Rest
Chair squat	20 secs	10 secs
Wall push-up	20 secs	10 secs
Walking lunge	20 secs	10 secs
Monster band horizontal row	20 secs	10 secs

As client progresses, eliminate exercises one at a time until eventually they do the whole 4 minutes of just one exercise.

## 7 Minute Challenge Complex

Complete 2 rounds. Rest as needed.

Exercise	Sets	Time
Low impact jumping jacks	1	30
Wall sit	1	30
High march in place	1	30
Monster band chest press	1	30
Walking lunges	1	30
Monster band upright row	1	30
Chair mountain climber	1	30

## 10 Minute Challenge Complex

Complete 2 round. Rest as needed.

Exercise	Sets	Time
Chair mountain climber	1	30
Med ball slam	1	30
Chair jacks	1	30
Med ball side to side slam	1	30
Chair squat thrusts	1	30
Med ball squat & toss	1	30
Chair push-ups	1	30
Med ball chest pass	1	30
Chair burpee	1	30
Med ball toe tap	1	30

## **Cool Down Complex**

Complete 1-3 rounds. Rest as needed.

Exercise	Sets	Time
Anterior shoulder stretch	1	10 – 15 secs
Piriformis stretch	1	10 – 15 secs
Hip flexor stretch	1	10 – 15 secs
Glute / Hamstring stretch	1	10 – 15 secs
Calf stretch	1	10 – 15 secs
Dorsiflexor stretch	1	10 – 15 secs

**Anterior Deltoid Stretches** 





Piriformis, Hip Flexor Stretches





Glute/Hamstring Stretch



Calf & Dorsiflexor Stretches



