



Appetite Stimulants for Elderly Clients

Objectives:

- **Review the factors associated with appetite and the complexities of appetite regulation.**
- **Understand the physiological and psychosocial reasons for appetite loss.**
- **Identify options for management of poor meal intake.**
- **Understand medications that may affect appetite and appropriate use of those that may stimulate appetite and weight gain.**

Introduction:

Appetite is a term that describes fulfilling a physical need and includes three components; hunger, a sensation that promotes food consumption, satiation, a sensation of fullness during eating and satiety, the fullness that exists between eating occasions. The physiological regulation of appetite is complex, linking the brain, digestive system, endocrine organs, and sensory nerves:

- Short term appetite – sensors in the gut that respond to the presence or absence of food.
- Ghrelin- secreted by the stomach in response to fasting to increase appetite.
- Peptide YY – secreted by the ileum and colon in response to food intake to suppress appetite.
- Cholecystokinin – secreted by the jejunum in response to fat and protein to suppress appetite.
- Insulin – secreted by the pancreas in response to high blood glucose to suppress appetite.
- Body composition affects these signals i.e. fat mass inhibits appetite through the hormone leptin secreted by fat cells.

These regulatory responses are homeostatic systems that regulate the nutritional status of the body by signaling the need for energy and nutrients. However, aging changes these normal responses; fasting levels of ghrelin are lower, levels of cholecystokinin are higher, baseline levels of leptin are higher, and insulin is frequently inadequate...yielding appetite impairment.

Physiological and psychosocial reasons for appetite decline and unintentional weight loss (UIWL):

- Decreased saliva production, swallowing problems, delayed gastric emptying
- Poor dentition and oral health
- Constipation – 30 to 40 % of community dwellers, greater than 50% in assisted living housing
- Acute illness – CHF, COPD, CKD, Parkinson's, cancer, pro-inflammatory cytokines, nausea, medication side effects, impaired dexterity, pain
- Sensory interference – smell, vision, taste; each affecting the enjoyment of mealtime.
- Psychosocial conditions related to poor meal intake include depression, dementia, delirium, living and eating alone, as well as retirement which impactfully changes routine, location, social contact, and finances.

Pharmaceutical impact on appetite:

There are numerous classes of medications that can affect appetite and meal intake including antibiotics, antifungals, antivirals, anti-Parkinson, muscle relaxants, migraine medications, antihypertensives, diuretics, statins, heart failure medication, antiarrhythmics, thyroid medication, tricyclic antidepressants, antipsychotics, mood stabilizers, hypnotics, bronchodilators, and anti-inflammatories. It is very probable in clients who have physician's orders for five or more medications that at least one may negatively affect appetite.



Managing and improving appetite through caregivers:

- Clients with dry mouth should be offered frequent sips of water during meals.
- Dentition and oral hygiene should be provided at least twice daily.
- Acute and chronic illnesses should be appropriately treated with attention to specific symptoms that may affect intake at that meal.
- Serve attractive and colorful meals that include client favorites and enhance the flavor of food with herbs, spices, and condiments. Smaller portions may impact resident acceptance.
- Encouragement, friendly assistance, and patience should be practiced at all meals.
- Many caregivers assume that anyone can assist another with eating and assistive feeding. However, it is not a simple procedure, training and experience are recommended.
- Nutritional supplements and meal replacements may be attempted for a short period of time. However, studies show that beverage meals leave older clients less satisfied than solid food at meals.

As a last resort, an appetite stimulant medication may be an appropriate option:

Medication	Indication
Mirtazapine (Remeron)	Depression
Amitriptyline (Elavil)	Depression
Gabapentin (Neurontin) Pregabalin (Lyrica)	Seizures/neuralgia/ Fibromyalgia
Cyproheptadine	Seasonal allergies
Olanzapine (Zyprexa)	Schizophrenia/manic episodes
Quetiapine (Seroquel)	Bipolar disorder
Oxandrolone (Oxandrin)	Adjunctive weight therapy
Testosterone	Hormone replacement therapy
Dronabinol (Marinol)	Chemotherapy associated symptoms
Nabilone (Cesamet)	AIDS related anorexia
Prednisone/Hydrocortisone	Anti-inflammatory/immunosuppressant agent
Megestrol (Megace)	Tx of advanced cancer

To date, clinical efficacy of these medications is limited. Adverse drug reactions occur frequently and symptoms vary. Selection of an agent should be patient and disease specific, based on the etiology of the reduced appetite and weight loss, gender and age of the patient, patient history, and concurrent medication therapies. (Additional information: <http://ispub.com/IJANP/11/1/9279>)

Conclusion:

The AND project *Unintended weight loss in older adults* in 2009 concluded that no research met the criteria for evidence analysis. Dietitians should consider all factors related to physical and psychosocial health and included consideration of advance directives and plans for palliative care. Optimization of social supports, discontinuation of medications that may interfere with eating, and provision of appealing food and feeding assistance may allow avoidance of prescription appetite stimulants and over use of high-calorie supplements.



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Name: _____
Position: _____
Date: _____

Appetite Stimulants for the Elderly

Pre-Test

1. True or False: The complexity of appetite regulation remains stable throughout all stages of life.
 2. True or False: Changes in appetite and UIWL are a result of physiological etiologies only.
 3. True or False: Effective resident meal assistance and feeding requires training and individualization.
 4. True or False: Research related to appetite stimulant medications is thorough and indicates successful outcomes.
 5. True of False: An appetite stimulant should be considered only when optimization of natural appetite techniques has been unsuccessful.
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Post-Test

1. True or False: The complexity of appetite regulation remains stable throughout all stages of life.
2. True or False: Changes in appetite and UIWL are a result of physiological etiologies only.
3. True or False: Effective resident meal assistance and feeding requires training and individualization.
4. True or False: Research related to appetite stimulant medications is thorough and indicates successful outcomes.
5. True of False: An appetite stimulant should be considered only when optimization of natural appetite techniques has been unsuccessful.



Answer key

1. False
2. False
3. True
4. False
5. True