



# ReadyCare

## Unintended Weight Loss and the Supplement Solution

Nancy Barwick, MS, RD, CD  
Midwest Regional Dietitian

**LYONS**



# Learning Objectives

- Identify the Resident at nutritional risk.
- List three problems related to weight loss and under nutrition.
- List three treatable causes for poor appetite.
- Describe two methods of nutritional intervention.
- List three types of supplement options.

ReadyCare

**LYONS**



# Who is at RISK??



- Prevalence of malnutrition in LTC facilities is estimated to be between **30%–60%**
- Patients over the age of 65 are at greater nutritional risk because of:
  - Comorbid illnesses
  - Common physiological changes due to aging.

ReadyCare

**LYONS**



# Why worry about unintended weight loss?

- Nutrition is an important factor of health in persons over the age of 65.
- Even slight weight loss in the elderly population is an independent predictor of morbidity and mortality.
- Rapid weight loss of 5% or more in one month is considered clinically significant.

**Ex: A 7 lb weight loss in a 140 lb person**



# Malnutrition vs. Effects of Aging

- Weight loss can sometimes be associated with age-related reductions in muscle mass, when there is really a malnutrition issue.
- Similarly...  
Obese elderly patients often have protein undernutrition that may be overlooked.

**THUS...**

- Malnutrition in the elderly can often be underdiagnosed!

ReadyCare

**LYONS**



# Remember....



- Unintended weight loss is a **red flag** for undernutrition. A resident can be undernourished, yet not underweight.
- Weight is one of the best parameters for evaluating change in nutritional status.

# Be the Detective!

- Early identification, assessment, and treatment of weight loss may prevent the morbid outcomes of malnutrition.
- Ask yourself: **WHY? OR HOW?**  
**What factors contributed to the weight loss?**



ReadyCare

**LYONS**



# Risk Factors

- Altered taste and smell
- Cognitive abnormalities
- Dementia
- Decreased appetite (anorexia)
- Bad teeth, poorly fitting dentures, sore mouth
- Nausea/ vomiting/diarrhea
- Malabsorption
- Anemia
- Stress, Depression
- Disease – Cancer, CHF, COPD
- Fatigue
- Muscle weakness
- Immune dysfunction
- Hip fractures
- Surgery
- Edema
- Pressure ulcers
- Infection

ReadyCare

**LYONS**





# Other Causes

- Environmental and food considerations
  - Likes and dislikes
  - Dining room environment
  - Liberal diets
- Physical and psychological factors
  - Teeth
  - Chewing and swallowing ability
  - Needs assistance eating or drinking
  - Depression

# Altered Nutritional Needs

- **THE BATTLE...**

- Increased energy and protein requirements are common in the elderly due to physical risk factors such as infection, surgery, disease (etc.)

**BUT..**

- Risk factors such as decreased appetite, bad fitting dentures and fatigue can make it difficult to consume **ADEQUATE** calories and protein.

ReadyCare

**LYONS**



# Remember....



## In this population....

- It is important to consume enough calories from fat and carbohydrate so that protein won't be used for energy and will be used to heal parts of the body damaged by surgery or illness.
- Protein quality and quantity in food is high priority! In order to achieve this, Medical Nutrition Therapy (ex:supplements) may be necessary.

ReadyCare

**LYONS**

# Identifying the Resident at Nutritional Risk



ReadyCare

**LYONS**



# Mini Nutrition Assessment Short Form (MNA)

- Example of nutritional screen and what types of risk factors are being targeted.
- In this particular assessment:
  - 12 points or greater: Normal – no need for further assessment
  - 11 points or below: Possible malnutrition – continue assessment

# Intake

- Has food intake declined over the past three months due to loss of appetite, digestive problems, chewing or swallowing difficulties?
- 0 \_ severe loss of appetite
- 1 \_ moderate loss of appetite
- 2 \_ no loss of appetite





# Weight Loss

- Weight loss during last three months



- 0 \_ weight loss greater than 3 kg (6.6 lbs)
- 1 \_ does not know
- 2 \_ weight loss between 1 and 3 kg (2.2 and 6.6 lbs)
- 3 \_ no weight loss

ReadyCare

**LYONS**



# Mobility

- 0 \_ bed or chair bound
- 1 \_ able to get out of bed/chair but does not go out
- 2 \_ goes out



ReadyCare

**LYONS**





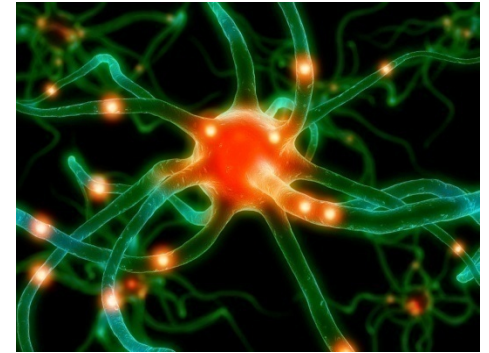
# Psychological or Disease

- Has suffered psychological stress or acute disease in the past three months
- 0 \_ yes
- 2 \_ no





# Neuropsychological



Neuropsychological problems

- 0 \_ severe dementia or depression
- 1 \_ mild dementia
- 2 \_ no psychological problems

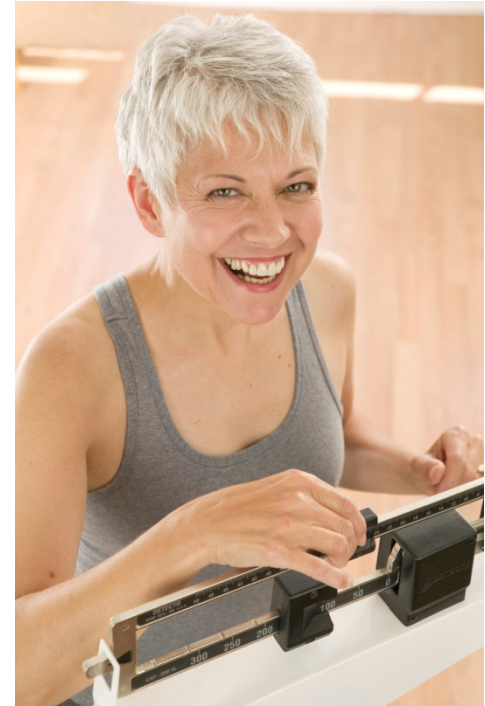
ReadyCare

**LYONS**



# Body Mass Index

- Body Mass Index (BMI)  
(weight in kg) / (height in m)<sup>2</sup>
- 0 \_ BMI less than 19
- 1 \_ BMI 19 to less than 21
- 2 \_ BMI 21 to less than 23
- 3 \_ BMI 23 or greater



ReadyCare

**LYONS**



# Recommendations for Intervention

- Score of 12 or greater = normally nourished
  - Rescreen:
    - After acute event or illness
    - Every 3 months
- Score of 11 or below = at risk for malnutrition
  - Continue to monitor for weight changes or treat by using a nutrition intervention
  - Provide a further in-depth nutrition assessment
  - Rescreen every 3 months

ReadyCare



# Additional Tools to Assess Status

- Anthropometric measurements (e.g. height, weight, weight change)
- Biochemical data, medical tests and procedures
- Client history (e.g. cognitive decline, depression, neurological disease, hydration status, presence of infection and pressure ulcers, recent hospitalization, admission to healthcare communities and female gender)
- Food/nutrition-related history (e.g. loss of appetite, swallowing problems, eating dependency, low physical activity level, decreased activities of daily living)

ReadyCare



# Let's Solve the Problem!



- Evaluate dining environment
- Type/amounts of foods served at and between meals
  - Food Preferences
  - Food Texture, Temperature
  - Food Quantity
- Vitamin and mineral supplements
- Pharmacologic intervention
- Other nutrition support routes
- ***Supplementation***



# Evaluate Dining Environment

- Are seats comfortable
- Do they like where and with whom they are sitting
- Is the setting colorful, enough light to see food
- Are there feeding assistants if needed?
- Consider Creative Dining Program



ReadyCare

**LYONS**

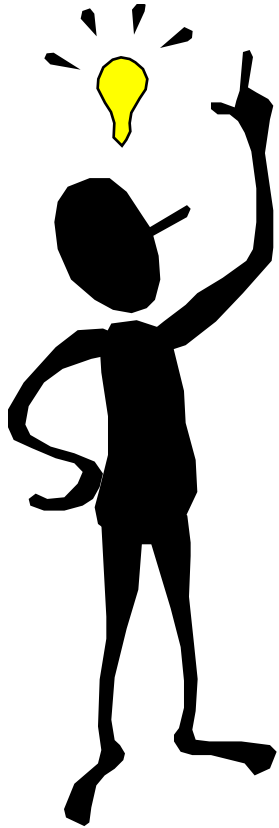
# Let's Solve the Problem!



- Evaluate dining environment
- Type/amounts of foods served at and between meals
  - Food Preferences
  - Food Texture, Temperature
  - Food Quantity
- Vitamin and mineral supplements
- Pharmacologic intervention
- Other nutrition support routes
- ***Supplementation***



# The Supplement Solution!



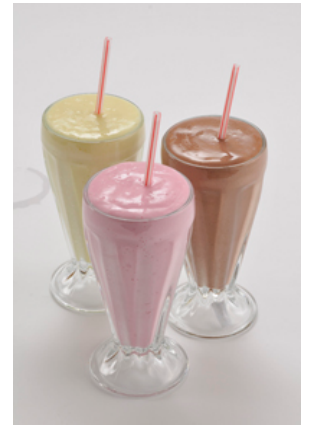
- Supplementation has been shown to produce a small but consistent weight gain in the elderly population with a beneficial effect on mortality and shorter length of hospital stay.

ReadyCare

**LYONS**

# Promote Good Consumption

- Offer variety of tastes and textures
- Maintain a higher level of satiety with fortified, high caloric, nutrient dense products
- Administer oral supplements in small dosage (make every ounce count)



ReadyCare

**LYONS**

# Choose supplements that are..

- High in calorie and contain a “complete” source of protein (ex. whey or soy).
  - A complete protein source provides the amino acids (building blocks of protein) that the body cannot produce itself.
    - Poultry, meat, fish
    - Eggs
    - Yogurt, milk, cheese
    - For Vegans: quinoa, soy, tofu



# Tips for Consumption

- Have a *Nutritional Juice Supplement* at breakfast in place of regular juice.
- Sip on *Frozen Shakes* or a *2.0 supplement* between meals.
  - ❖ Other beverages can fill you up but do not have calories or protein (ex. coffee, tea, water).
- Swap your dessert for a *Frozen Dessert Supplement*. Add toppings like you would to your favorite ice cream.

ReadyCare

**LYONS**

# Remember...

- Consuming small frequent meals or snacking between meals can help gain weight.
- Aim for 6 meals/snacks each day.
- FACT: Consuming protein with a high carbohydrate snack has shown to be more beneficial than giving it as part of a low-energy snack.
- **Incorporate high calorie, high protein supplements as part of a daily routine!**

ReadyCare

**LYONS**

# Supplement Solution

## (Example)

Supplement Breakfast w/  
Protein Powder Mix

30 cal

6 g PRO

In between meal snack  
(2)4 fl oz Frozen Shakes

400 cal

12g PRO

Dessert at Dinner

Frozen Dessert Supp

300 cal

9 g PRO

TOTAL

EXTRA

730 cal

27g PRO

ReadyCare

**LYONS**

# Supplement Solution

## (Example)

Med Pass program  
2.0 Supplement  
3oz, TID

540 cal

22 g PRO

Bedtime Snack

Frozen Dessert Supp

300 cal

9 g PRO

TOTAL

EXTRA 840 cal

31 g PRO

ReadyCare

**LYONS**

# Benefits of Supplements

- Calorically dense to help combat decreased appetite
- Flavorful and appealing to an older population with altered taste
- High in protein to help in wound healing
- Available in a variety of flavors and options to help with taste fatigue
- Appropriate for a variety of diets

ReadyCare

**LYONS**



# Supplement Examples

- Frozen shakes – available in PLUS and No Sugar Added
- Nutritional Drinks
- Frozen Nutritional Treats or Magic Cups
- Med Pass – very concentrated in calories and protein
- Protein Powder – combines easily with many foods

# Getting Enough Calories and Protein can be easy with the Supplement Solution



ReadyCare

**LYONS**



# ADA Position

- The position of The American Dietetic Association is that when dietary selection is limited, nutrient supplementation can be useful in meeting the RDAs. When scientific evidence indicates benefits of increased nutrient intake beyond what is commonly consumed by a population group and there is no risk of unsafe intakes for others, food fortification may be more effective than vitamin supplementation. (1)

(1) "Position of The American Dietetic Association: Vitamin and Mineral Supplementation"  
[www.eatright.org/asupple.html](http://www.eatright.org/asupple.html)

ReadyCare

**LYONS**

# References:

- Castellanos VH, Litchford MD, Campbell WW. Modular Protein Supplements and Their Application to Long-Term Care. *Nutr Clin Pract* 2006;21:485-504
- Disease: Weight Management: Underweight: Overview. ADA Nutrition Care Manual. 2009. Available at: <http://www.nutritioncaremanual.org/index.cfm? Page=Diseases&topic= 11258&headingid=11323>. Accessed June 24, 2009.
- Wells JL, Dumbrell AC. Nutrition and aging: assessment and treatment of compromised nutritional status in frail elderly patients. *Clin Interv Aging* 2006;1(1): 67-79
- Miline AC, Potter J, Avanall A. Protein and Energy Supplementation in Elderly People and Risk for Malnutrition. *Cochrane Database Syst. Rev.* 2005: (2): CD003288
- Guigoz Y, Vellas B, Garry PJ., Assessing the nutritional status of the elderly: The Mini Nutritional Assessment as part of the geriatric evaluation, *Nutr Rev* 1996;54:S59-S65.
- Vellas B, Villars H, Abellan G et al., Overview of the MNA® – It's history and challenges., *J Nutr Health Aging* 2006;10:455-465.
- Guigoz Y, Vellas J, Garry P (1994)., Mini Nutritional Assessment: A practical assessment tool for grading the nutritional state of elderly patients., *Facts Res Gerontol* 4 (supp. 2):15-59.
- Murphy MC, Brooks CN, New SA, Lumbers ML., The use of the Mini Nutritional Assessment (MNA) tool in elderly orthopaedic patients., *Eur J Clin Nutr* 2000;54:555-562.