

CHANGING LIVES
IMPROVING LIFE

# "Super Menus" Optimizing nutrition in long term care

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## Agri-Food for Healthy Aging: aha.the-ria.ca



## Malnutrition is a problem in long term care

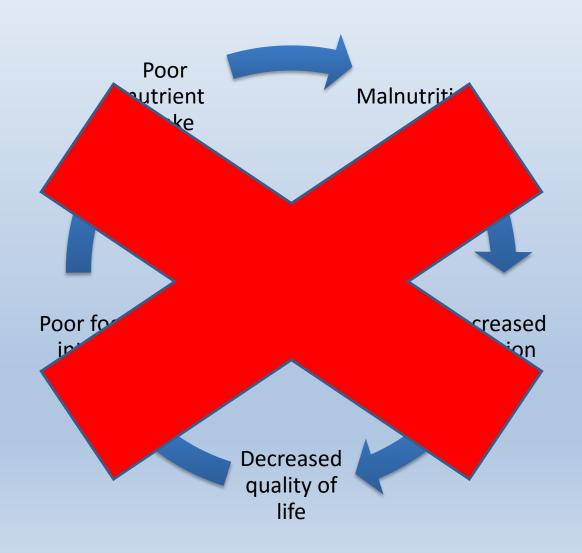






- 20-60% of LTC residents are affected
- It is preventable
- A-HA is looking at this
  - Making the Most of Mealtimes (M3)
  - Putting more nutrition on the plate
  - Nutrition in Disguise

## Poor food intake is a main reason for malnutrition



## **Food First Strategies**

Micronutrient enhancement "Super Menu" development Nutrition by disguise





## Menu analysis

- Menus from 5 homes selected for analysis
  - Homes chosen to represent provinces, type home, diversity
- ESHA Food Processor nutrient analysis program
- eaTracker used to count CFG servings and confirm ESHA results

### Micronutrients of concern

#### From menu analysis:

- Vitamin D
  - mean 8.9 μg (RDA 20 μg)
- Vitamin E
  - mean 5.13 mg (RDA 15 mg)
- Folate
  - mean 260 μg DFE (RDA 400)
- Magnesium
  - mean 255 mg (320F/420M mg)
- Potassium
  - mean 2854 mg (4700 mg)

#### From literature:

Intakes <50% RDA

- Vitamin D
- Vitamin E
- Folate
- Calcium
- Vitamin B6
- Vitamin B12
- Zinc

## "Supermenu" development

- Focused on 11 micronutrients
- Common foods in LTC
- The total volume = current consumption volumes
- Timing can't change ie breakfast items at breakfast
- Must include food preferences

## "Supermenu" development

- Strategies include:
  - Addition of herbs and spices
  - Inclusion of food item varieties with different micronutrient contents
  - Replace water with other liquids
  - Alter cooking methods
    - Steam vegetables, reuse vegetable water

FOODS AND	CHOICES	
INGREDIENTS		
Vegetables and Fruit	<u>Vegetables:</u> Bell pepper (red), Broccoli, Cabbage (red), Carrot, Eggplant, Endive (curly), Fennel, Kale, Mushrooms, Potatoes w skin, Spinach, Squash (butternut, zucchini), Sweet potatoes <u>Fruits:</u> Apricots, Clementine, Oranges	
Grain Products	Bran, Brown Rice, Quinoa, Wheat germ	
Meat and Alternatives	Beans: Black beans, Chickpeas, White beans Nuts/seeds: Almond, Flax, Pecan, Pumpkin, Squash, Sunflower, Walnut, Nut butters (almond butter)	
Milk and Alternatives	Cheese (Ricotta, Mozzarella, Swiss), Milk, Soy milk, Yogurt	
Fats and Oils	Butter, Canola oil, Margarine,	
Herbs and Spices	Herbs: Basil, Bay leaf, Cilantro, Coriander, Oregano, Parsley, Rosemary, Thyme Spices: Cinnamon, Chili/cayenne pepper, Cloves, Cumin, Garlic, Ginger (ground vs root), Nutmeg, Paprika, Turmeric	

#### SUPER TURKEY QUINOA CHILI

#### Quinoa, cooked (1 cup)

Folate: 19%,

Magnesium: 30%,

Zinc: 13%,

Selenium: 7%

#### Chili powder (1 tbsp)

Vitamin A: 44%,

Vitamin E: 11%,

Iron: 6%

#### Cilantro, dried (1 tbsp)

Vitamin C: 17%, Vitamin K: 30%



#### Black beans (1 cup)

Calcium: 5%,

Potassium: 17%,

Zinc: 13%

#### White beans (1 cup)

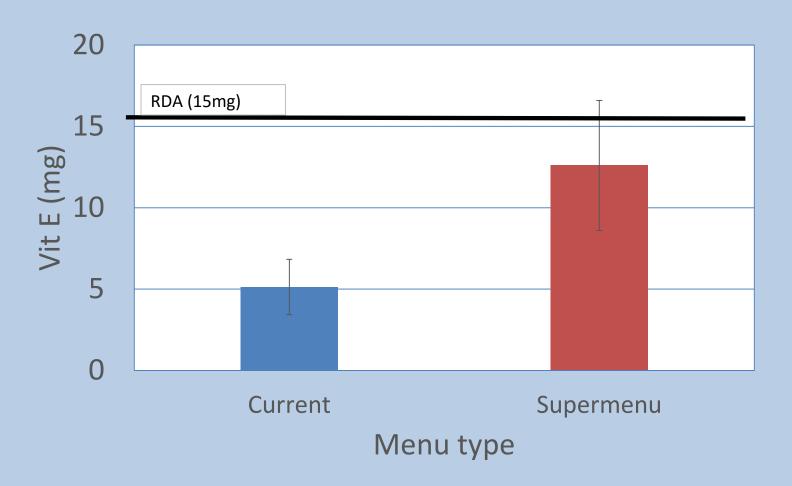
Calcium: 16%,

Potassium: 29%,

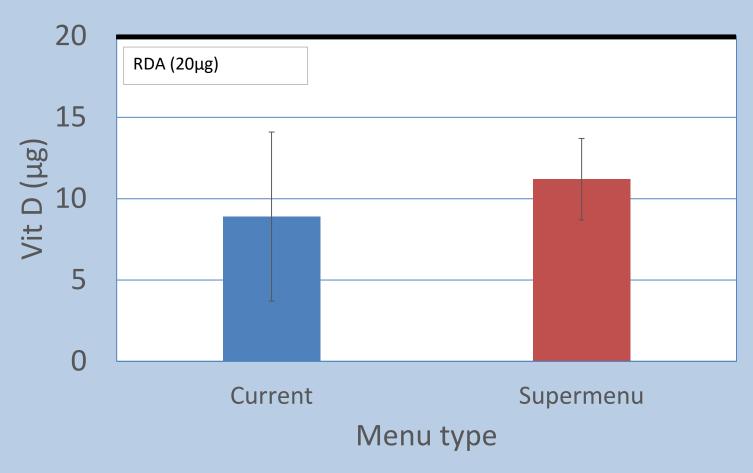
Zinc: 16%

(Lam, 2014)

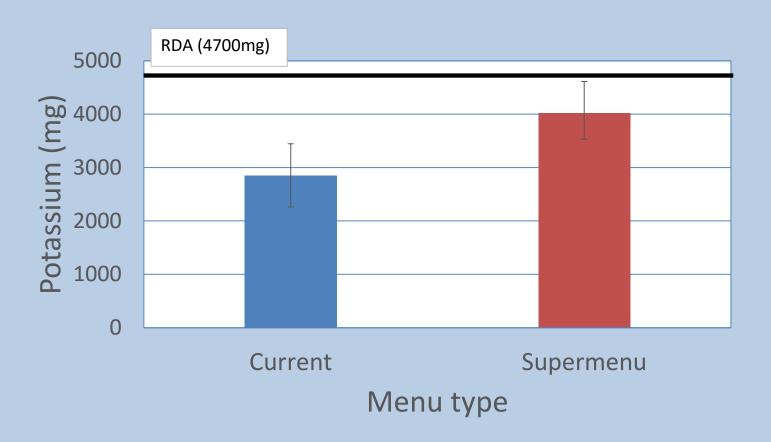
## **Daily Vitamin E provision**



## Daily Vitamin D provision



## Daily potassium provision



## Super Apple-Bacon muffin



#### Ingredients contributing extra nutrients:

Apple, bacon, spinach, seeds

Nutrit Serving Size ( Servings Per	(34g)		cts			
Amount Per Serv	ing					
Calories 90	Calc	ries fron	n Fat 40			
		% Da	aily Value*			
Total Fat 4.5g	9		<b>7</b> %			
Saturated Fat 1.5g 8%						
Trans Fat 0g						
Cholesterol 10mg						
<b>Sodium</b> 160mg <b>7</b> %						
Total Carboh	ydrate 8	3g	3%			
Dietary Fiber 1g 4'						
Sugars 2g						
Protein 4g						
Vitamin A 10%	6 • \	/itamin 0	2%			
Calcium 8%	•	ron 4%				
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:  Calories: 2,000 2,500						
Total Fat I Saturated Fat I Cholesterol I	Less than Less than Less than Less than	65g 20g 300mg 2,400mg 300g 25g	80g 25g 300mg 2,400mg 375g 30g			

## Super Kale and Red Cabbage slaw



#### **Ingredients:**

Kale, red cabbage, carrots, red onion, parsley

#### **Nutrition Facts**

Serving Size (74g) Servings Per Container

Amount Per Serving	1	
Calories 70	Calorie	s from Fat 45
		% Daily Value*
Total Fat 5g		8%
Saturated Fat 0.5g		3%
Trans Fat 0g		
Cholesterol 0mg		0%
Sodium 620mg	26%	
Total Carbohydrate 6g		2%
Dietary Fiber 2g		8%
Sugars 3g		
Protein 1g		

### Vitamin A 80% • Vitamin C 50% Calcium 4% • Iron 4%

\*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gran	n·		

Fat 9 · Carbohydrate 4 · Protein 4

### Supermenus....

- Match current menus for food volume and caloric level (2046kcal/day)
- Meets RDA's for most micronutrients
- Still left to be done....
  - Assess feasibility of implementation
  - Examine barriers and facilitators

## We need you....

 If you work in healthcare and have successfully incorporated local food onto your menus
 OR

 If you work in a long term care home and you would like to talk to us about nutritional enhancement of menus

**CONTACT ME:** 

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## Questions?

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