Nutrition in the Elderly

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REGISTERED NUTRITIONIST

The Main Problems in Elderly

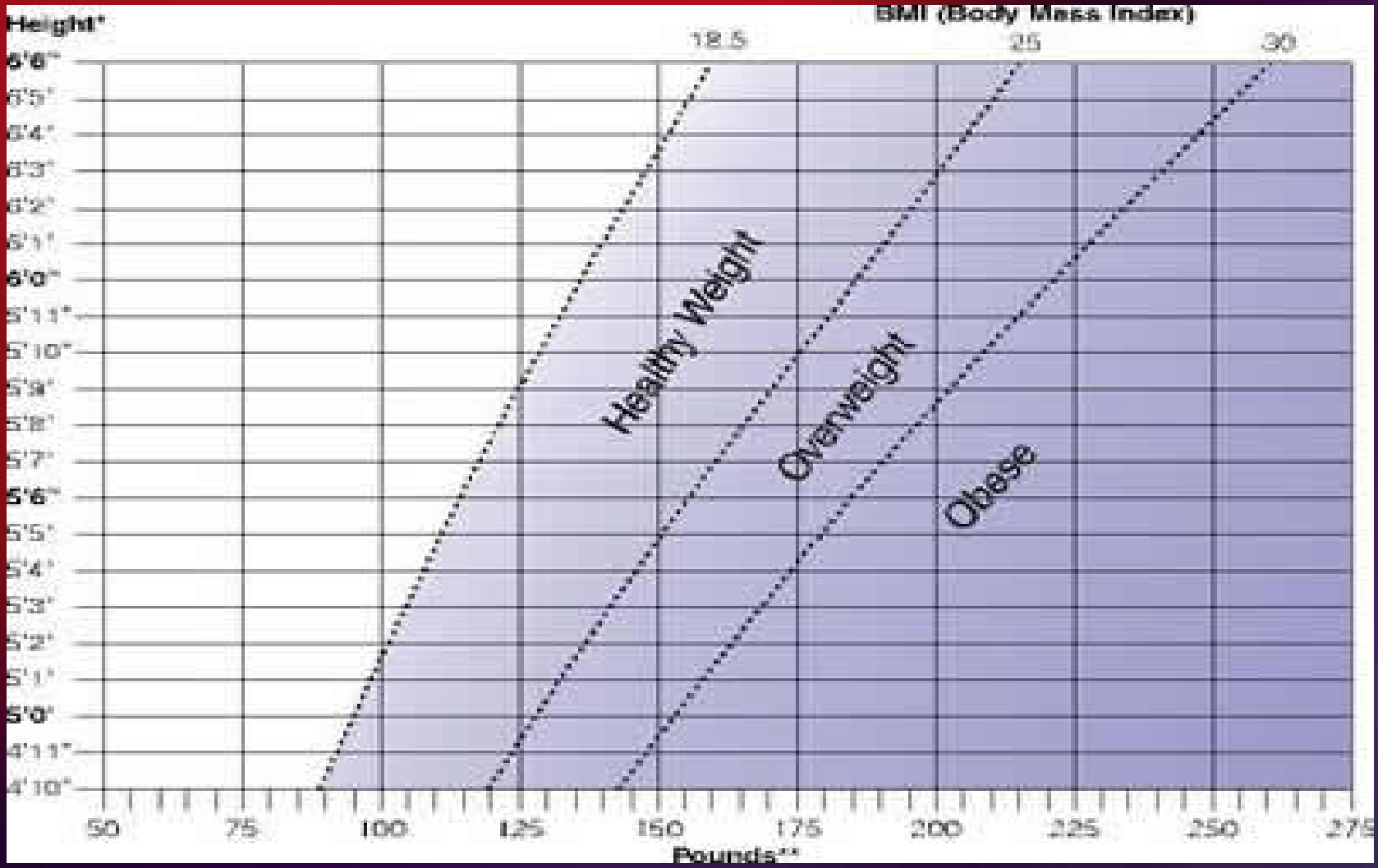
- Undernutrition
- Overnutrition
  - Overweight
  - Obesity
- Health Conditions
  - High blood pressure
  - High cholesterol
  - Diabetes
  - Arthritis
  - Others e.g. stomach and intestinal problems

Weight Classification

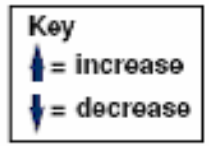
Body Mass Index (BMI): $\frac{\text{Weight (kg)}}{\text{Height}^2\ (\text{m}^2)}$

Ratio:
- **< 20 – Underweight**
- **20-25 – Normal weight range**
- **25-30 – Overweight**
- **30-35 – Obese I**
- **>35 – Obese II**

Weight Classification



Reasons for Undernutrition



The Obesity Epidemic

- Western Europe: 10-25%
- U.S.: 20-30%
- Eastern Europe, Mediterranean, U.S. Afro-American Women: 40%
- Higher Rates: American Indians, Hispanic Americans, Pacific Islanders
- Highest in the World: Melanesians, Micronesians, Polynesians (Island of Nauru: 70% or women and 65% of men)
- “Key to the problem lies in evermore widespread sedentary lifestyle and a diet overrich in calories and fats.”

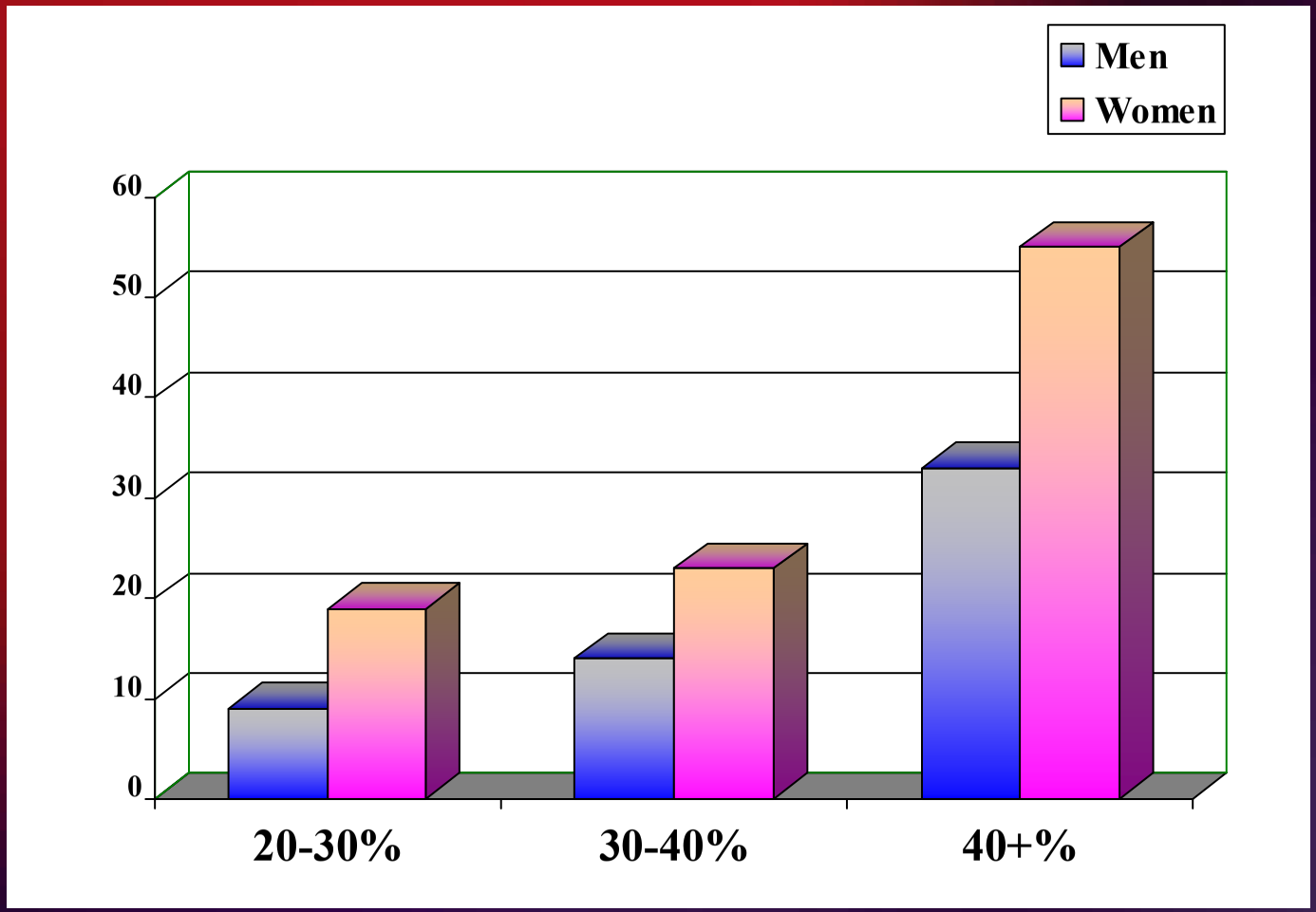
Implications of Obesity

- Insulin Resistance
- Diabetes Type II
- Hypertension
- Dyslipidemia
- Coronary Heart Disease
- Gout
- Osteoarthritis
- Gall Bladder Disease & Stones
- Cancers of Bowel, Breast, GU Tract
- Skin Diseases (especially fungal diseases)
- Sleep Apnea with chronic hypoxia

Breast Cancer Risk with Obesity

	Pre-menopause *Risk*	Post-menopause *Risk*
• Thin	1	1
• Overweight	2x	5x
• Obese	3x	12x

Risk of Death with Obesity



% of increased risk of death

Above average body weight

Social & Psychological Implications of Obesity

- Low self-esteem
- Increase in depression
- Tendency toward social isolation
- Decreased attractiveness for the opposite sex

Nutritional Services for the Elderly at Zammit Clapp Hospital

- Presence of a nutritionist on a weekly basis for:
  - Ward assessment of nutritional intake
  - Enteral and parenteral feeding regimes
  - Meal planning for in-/out-patients
  - Follow-up of patients before and after discharge
  - Formulation of special dietary requirements
  - Training of relatives in feeding techniques in preparation for discharge

Special Diets for the Elderly at Zammit Clapp Hospital

- Special diets are required for persons with conditions such as:
  - Diabetes
  - High Blood Cholesterol
  - Gall Stones
  - High Blood Pressure
  - Obesity
  - Undernutrition

Meals for the Elderly at Zammit Clapp Hospital

- Meal planning within the hospital:
  - A rotating menu is agreed upon with the caterer
  - Choices are made a day before
  - Menus cater for low calorie, diabetic and low fat options
  - Minor alterations can be made early on the day

Nutritional Assessment for the Elderly at Zammit Clapp Hospital

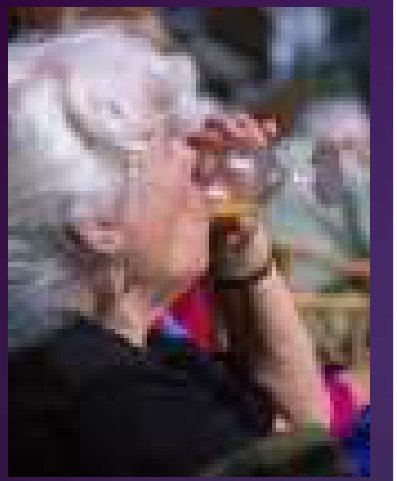
- Nutritional assessment on admission is done using the Mini Nutritional Assessment Scale
  - This has been developed by a group of international geriatricians and a leading company of nutritional products.
  - It is both a screening and assessment tool for the identification of malnutrition mostly in the elderly.
  - This tool eliminates the need for more invasive tests such as blood sampling.
- Blood investigations e.g. serum proteins and albumin, serum electrolytes

The Mini Nutritional Assessment

- The MNA assesses:
  - appetite
  - weight loss
  - mobility status
  - psychological stress
  - dementia/depression status
  - degree of independent living
  - number of drugs taken per day
  - pressure sore status

The Mini Nutritional Assessment

- The MNA assesses:
  - number of full meals eaten per day
  - number of protein servings taken per day
  - fruit and vegetables eaten daily
  - number of cups of fluid taken per day
  - degree of help needed for feeding
  - self-assessment of nutritional status
  - self-assessment of health status
  - mid-arm and calf circumference



Obtaining More Dietary Information From The Elderly

- During individual sessions the nutritionist:
  - Includes relatives to obtain more information
  - Takes a food history – first visit
  - Calculates calorific needs and intake plus mineral and vitamin levels using nutritional analysis software
  - Asks them to keep a diary
  - Keeps weight records
  - Maintains regular follow-ups

Our Aim For The Elderly

- Maximum independence
- Healthy lifestyle