

**THE NEEDS OF THE PERSON
LIVING WITH OBESITY**

SUSAN GALLAGHER PHD
CELEBRATION INSTITUTE, INC.
626-733-6242
SUSANGALLAGHER@HOTMAIL.COM



GOAL

Measurement and definition

Demographics

Adiposity

Pathophysiology

Clinical challenges

SPHM as the solution

Case study

MEASUREMENT

Body weight

Body Mass Index (BMI)

Weight distribution

Activity and mobility

BMI

Most commonly accepted

Weight(kg)/Height (m) squared

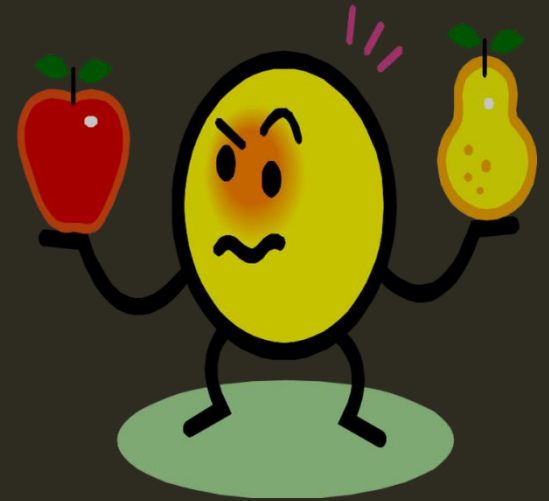
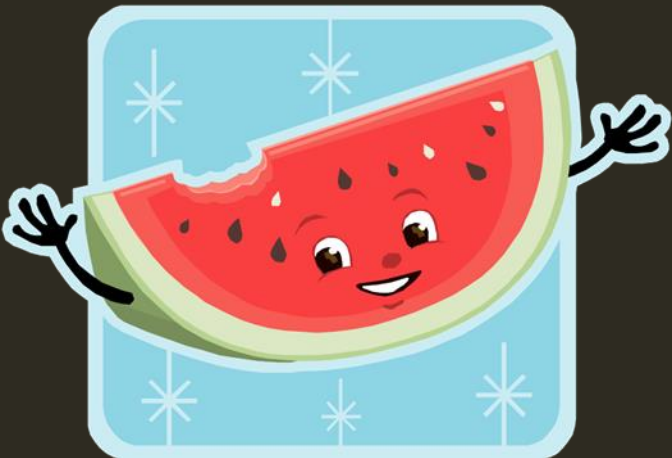
- 20 – 25.9 healthy
- 26 – 29.9 overweight
- 30 – 39.9 obese
- > 40 morbidly obese

WEIGHT DISTRIBUTION

Upper body obesity

Lower body obesity

Generalized obesity



ACTIVITY AND MOBILITY

Pain

Uncooperative

Shortness of breath

Any difficulty in moving

DEFINITIONS

Obesity – A weight higher than what is considered a healthy weight for a given height. ¹

Diabesity – Due to the strong association of obesity and diabetes, the term “diabesity” was coined, suggesting a causal pathophysiological link between both phenomena. ²

Bariatric

¹ Defining adult overweight and obesity. Accessed at: <https://www.cdc.gov/obesity/defining>

² Chadt A, Scherneck S, Joost HG, et al. Molecular links between obesity and diabetes: Diabesity. 2014. Accessed at: [ncbi.nlm.nih.gov](https://www.ncbi.nlm.nih.gov)

BARIATRICS

A term derived from the Greek word *baros*, and refers to the practice of healthcare relating to the treatment of obesity and associated conditions...

BARIATRICS

.....the implication for caregivers is that activities such as turning, lifting, and repositioning can predispose caregivers to physical injury...

BARIATRICS

.....additionally, failure to provide adequate patient activity and immobility leads to issues of patient safety.

GLOBAL IMPLICATIONS

1.9 billion adults are overweight or obese

Over 600 million adults are obese

13% of the world's population were obese in 2014

Nearly 40% of those over 18 years old are overweight or obese

41 million children under 5-years-old are overweight or obese

The worldwide prevalence doubled between 1980 and 2014

More adults suffering from the effects of obesity than from starvation worldwide

DEMOGRAPHICS

67 – 71.4 % of Americans are overweight

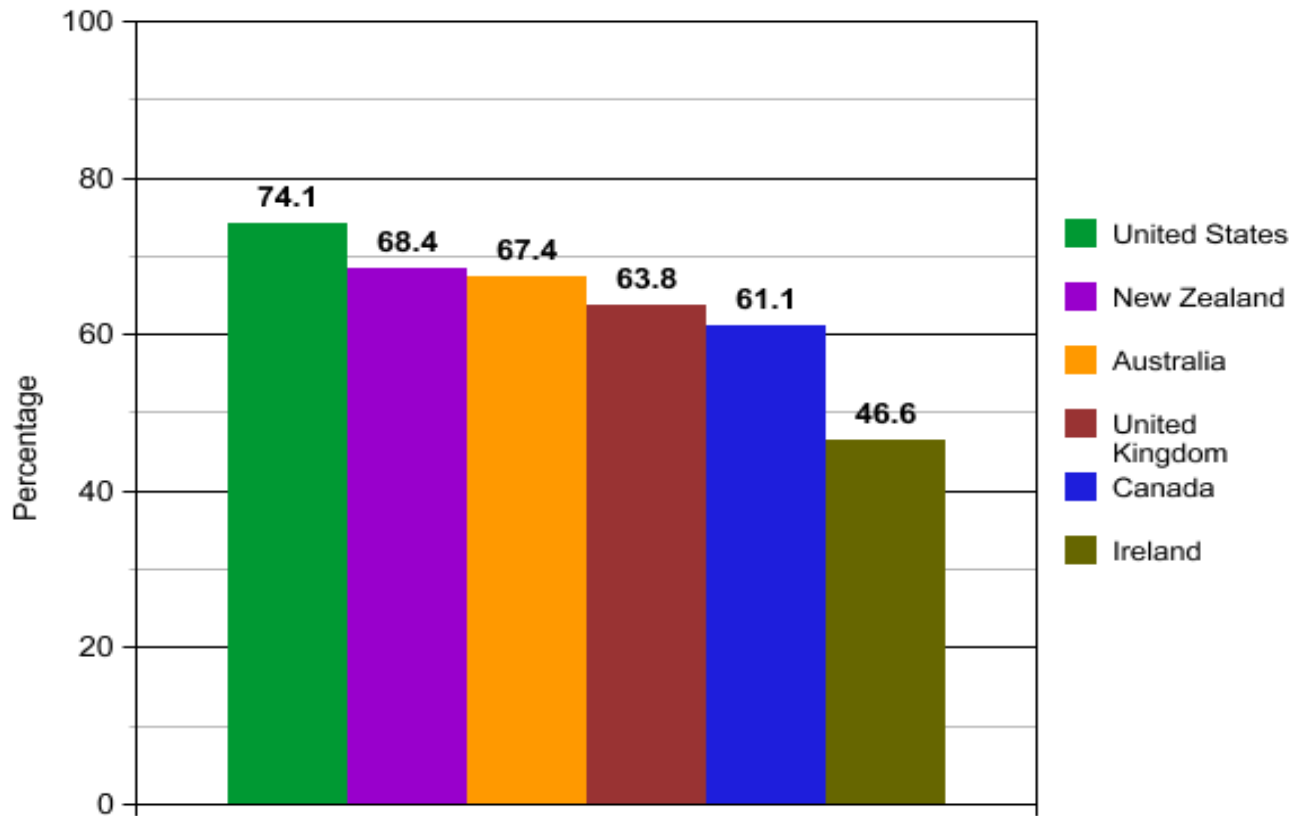
10 - 35% obese (category 1 & 2)

6.4% morbidly obese (category 3)

WHAT'S HAPPENING IN THE USA?



PREVALENCE OF OVERWEIGHT IN THE ANGLOSPHERE



SOURCE: World Health Organization, 2007

ADIPOSIITY — CELLULAR AND MOLECULAR IMPACT

Metainflammation

Gene expression networks lead to metabolic dysfunction

Reframe obesity as an inflammatory disease

Lumeng CN, Saltiel AR. Between obesity and metabolic disease. *J Clin Investigation*. 2011;121(6):2111-2117.

PATHOPHYSIOLOGY

Endocrine

Cardiac

Vascular

Respiratory

Musculoskeletal

Gastrointestinal

Integumentary

Emotional

CLINICAL CHALLENGES

Staffing requirements

Space/room design

Diagnostic and interventional

Availability, placement of technology

Patient safety issues

Threat to caregiver safety

Hazards of immobility

HAZARDS OF IMMOBILITY

Gallagher SM. Practical Guide to Bariatric Safe Patient Handling and Mobility: Improving safety and Quality for the Patient of Size. Visioning Publishers: Sarasota FL. 2015.

ENDOCRINE

Neuropeptides, cytokines, adipokines

Excess weight and weight maldistribution

Metabolic Syndrome (one million kids)

CARDIAC

Plasma volume changes

Affect on HGB and HCT

Cardiac output and stroke volume

Strong predictor for cardiovascular disease

BMI compared to central obesity as a predictor for morbidity

VASCULAR

Lymphedema, lipedema and edema

Peripheral vascular disease

Increased viscosity of the blood

Mechanical danger of central obesity

Difficulty with chemo-prophylaxis

Poorly fitting SCD, foot pumps

RESPIRATORY

Oxygen-carbon dioxide imbalance

Risks of atelectasis and pneumonia

Delayed or traumatic intubation

Exacerbation of pre-existing conditions

Obesity Hypoventilation Syndrome

MUSCULOSKELETAL

Joints, tendons, ligaments and muscles are designed to move

Risk of falls

...legs and back!

Calcium loss

Muscle spasms

Mechanical stress to joints

Chronic pain

GASTROINTESTINAL

Alterations in taste and smell

Constipation, followed by fecal impaction, liquid stool and incontinence
dermatitis

Danger of Fournier's Gangrene

Threat of GERD

Elevated intra-abdominal pressure and cytokines

INTEGUMENTARY

Largest organ of the body

Greater pressure

Less vascularity in adipose tissue

Greater friction and shear

Skin to weight ratio – perspiration

Untreated dermatitis

Urinary incontinence

Atypical pressure ulcers/injury

**SPHM AS THE SOLUTION TO
HAZARDS OF IMMOBILITY**

AREAS/SETTINGS

Rehabilitation

ICU

Radiology

Emergency department



DISCIPLINE

Therapy

Nursing



TASKS

In-bed repositioning

Static limb holding

Lateral transfer

Ambulation



CASE STUDY



THANK YOU!

Ideas

Questions

Concerns

