



MPHA Policymaker Town Hall: Obesity is a Chronic Disease

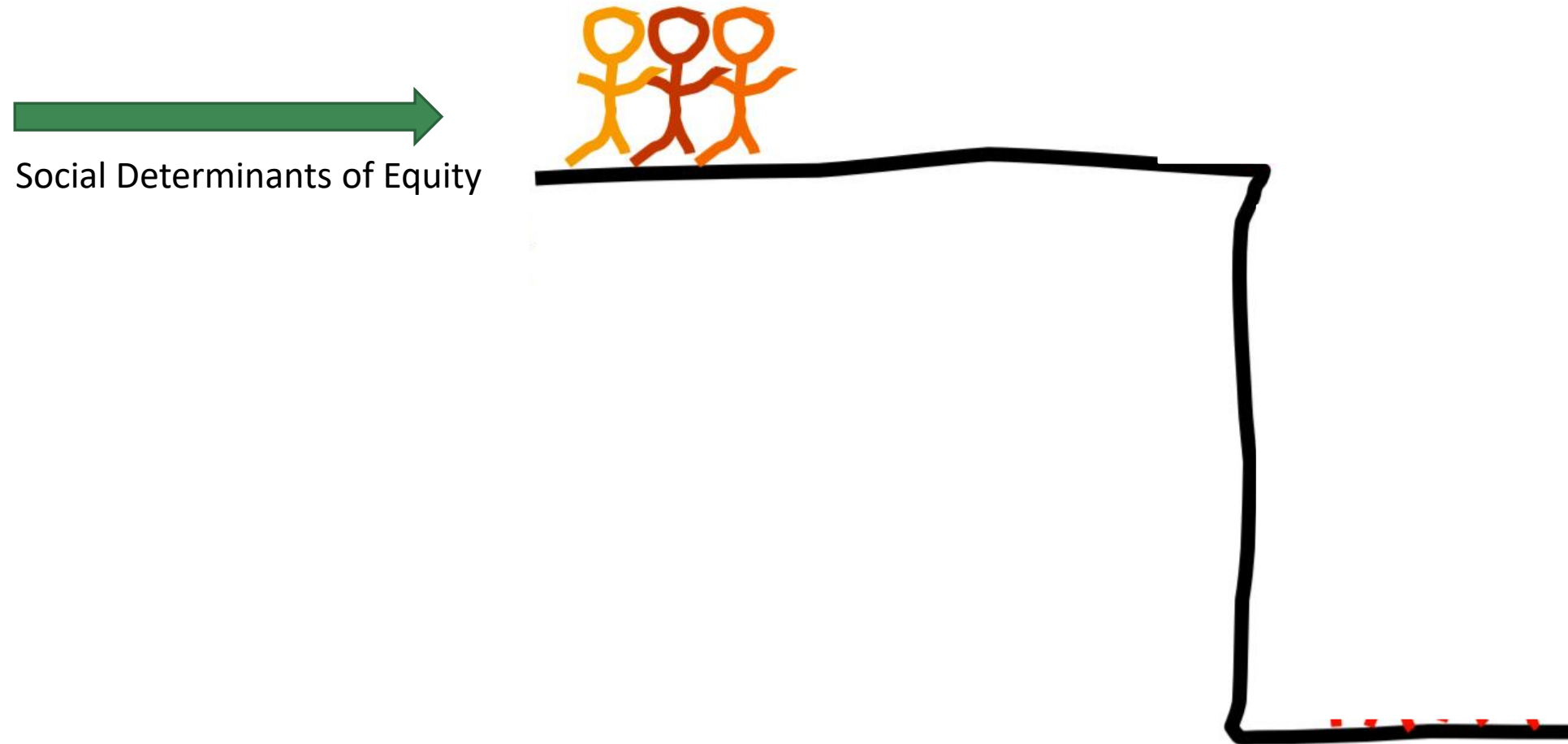
APRIL 16, 2021

Welcome & Agenda

- Welcome
- Prevention & Systems Overview
- Panel Presentation
 - Val O'Hara, DO, WOW 4 Wellness Clinic, Penobscot Community Health Center
 - Tara Whiton, PhD, University of Maine at Presque Isle
 - Renee Page, MPH, PS-C, CLC, Healthy Communities of the Capital Area
 - Becca Boulos, MPH, PhD, Maine Public Health Association
- Question & Answer
- Closing

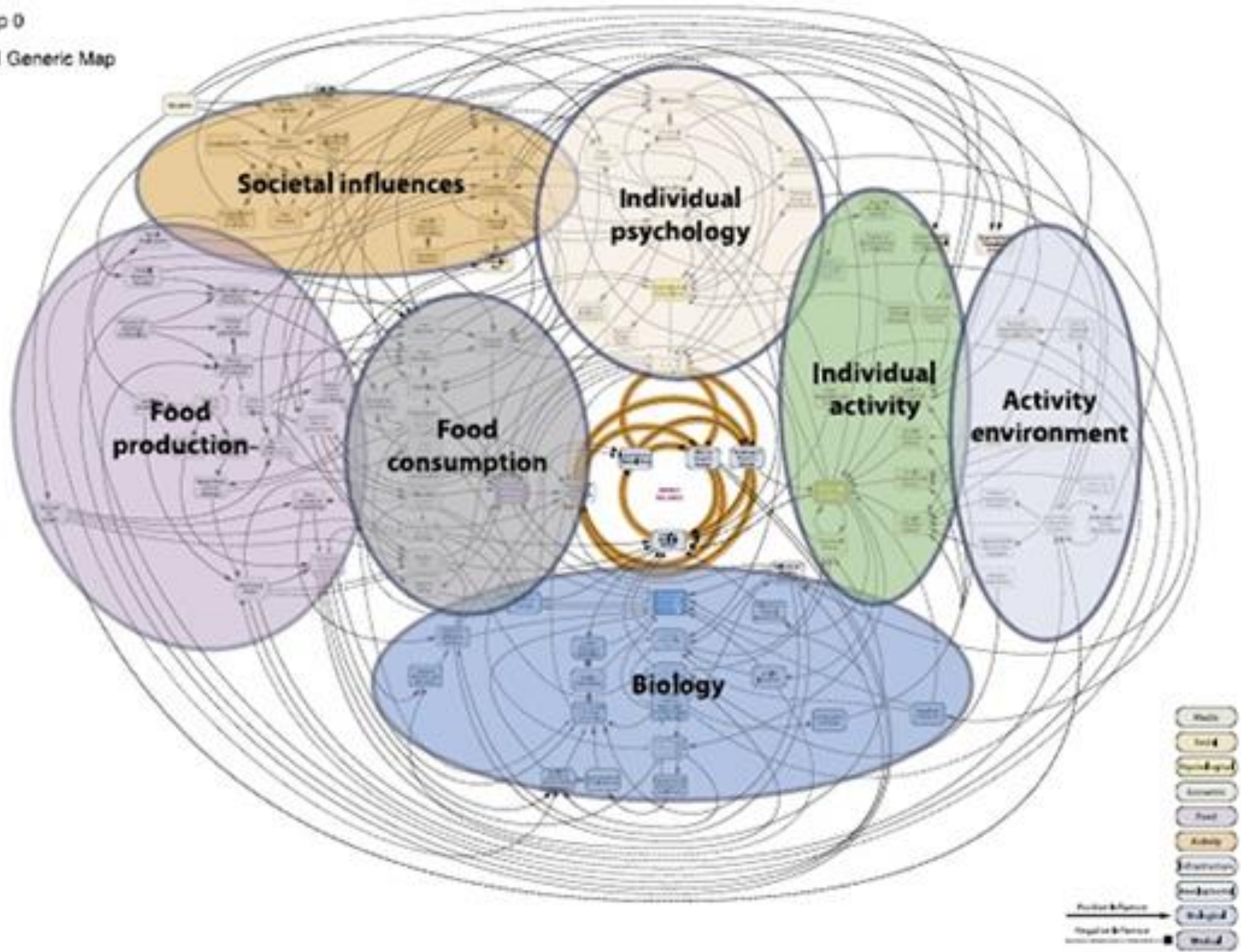


Public Health: Levels of Prevention



Map 0

Full Generic Map



MPHA Town Hall

Understanding Obesity is a Chronic Disease via Understanding the Definition & Pathophysiology

Dr. Valerie M. O'Hara, FAAP

Diplomate of the American Board of Obesity Medicine

Medical Director, WOW 4 Wellness Clinic, PCHC



Obesity is a Chronic Disease

Definition:

Obesity is a complex, chronic, relapsing disease where excess body fat leads to physiological impairments. The disease of obesity increases the risk of developing other chronic diseases and is associated with early mortality and reduced quality of life.

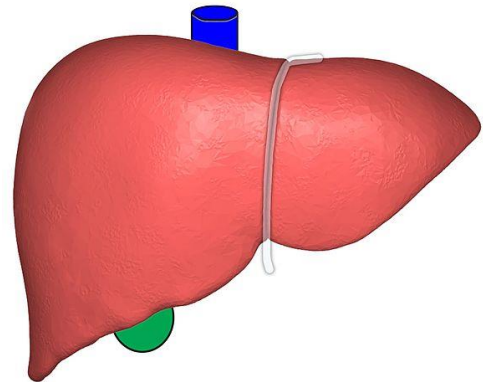
Obesity: Basic Physiology & Homeostasis

The body seeks a stable fat mass

Just as other regulated tissues do
At the subconscious level via
homeostatic physiologic mechanisms

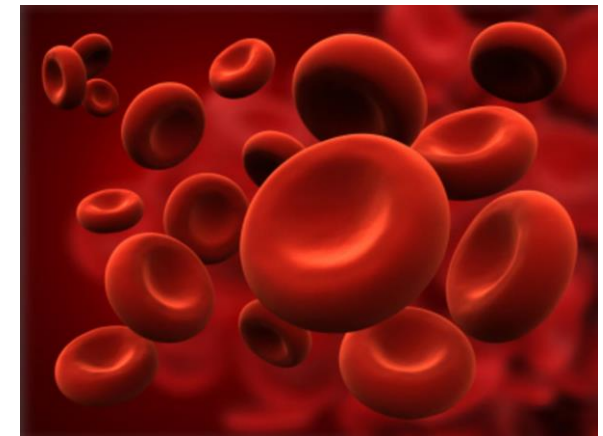


Adipocyte: Fat Cell



Liver

Red Blood Cells



Maine Obesity Data

Adults:

- 31.7% obesity
- 43.3% overweight
- **690,000 adults affected**

Children:

- 14.9% obesity
- 14.6% overweight
- **84,000 children affected**

The Energy Regulatory System (ERS):

Hormonal and Neural control, modulated by Environmental factors

Hormonal Control

Leptin
Adiponectin
Insulin
Glucagon
Ghrelin
GLP-1, GIP
PYY
Cortisol

Hormonal
Control

ERS

Neural
Control

Neural Control

Cognitive Brain
Hedonic (Primal)
Brain
Homeostatic
(Hypothalamus)

Microbiota
Inflammation
Infection
Obesogens
Physical Activity

Environmental
Modulation

Food type
Food availability
Circadian Rhythm
Thermoregulation (Brown Fat)
Stress

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



Medical Complications of Obesity

Metabolic

Structural

Inflammatory

Degenerative

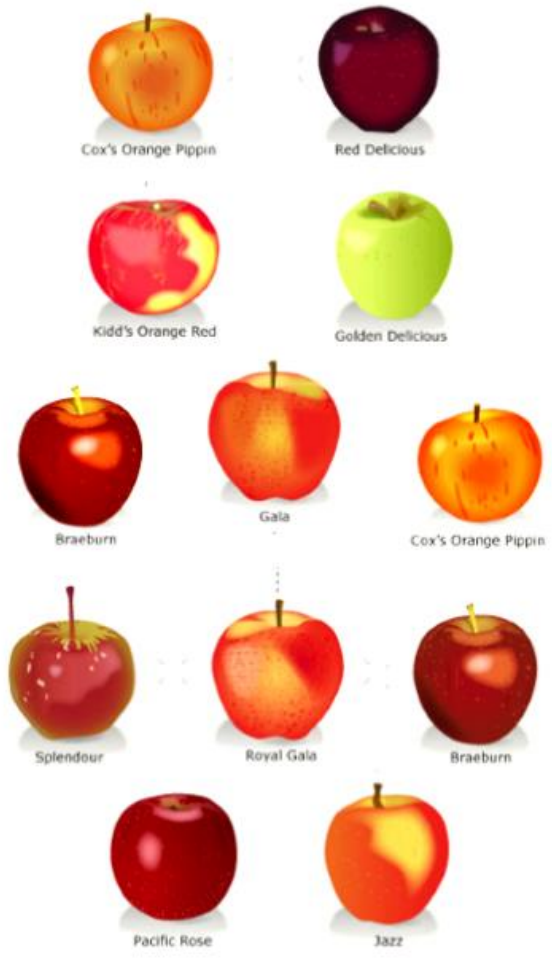
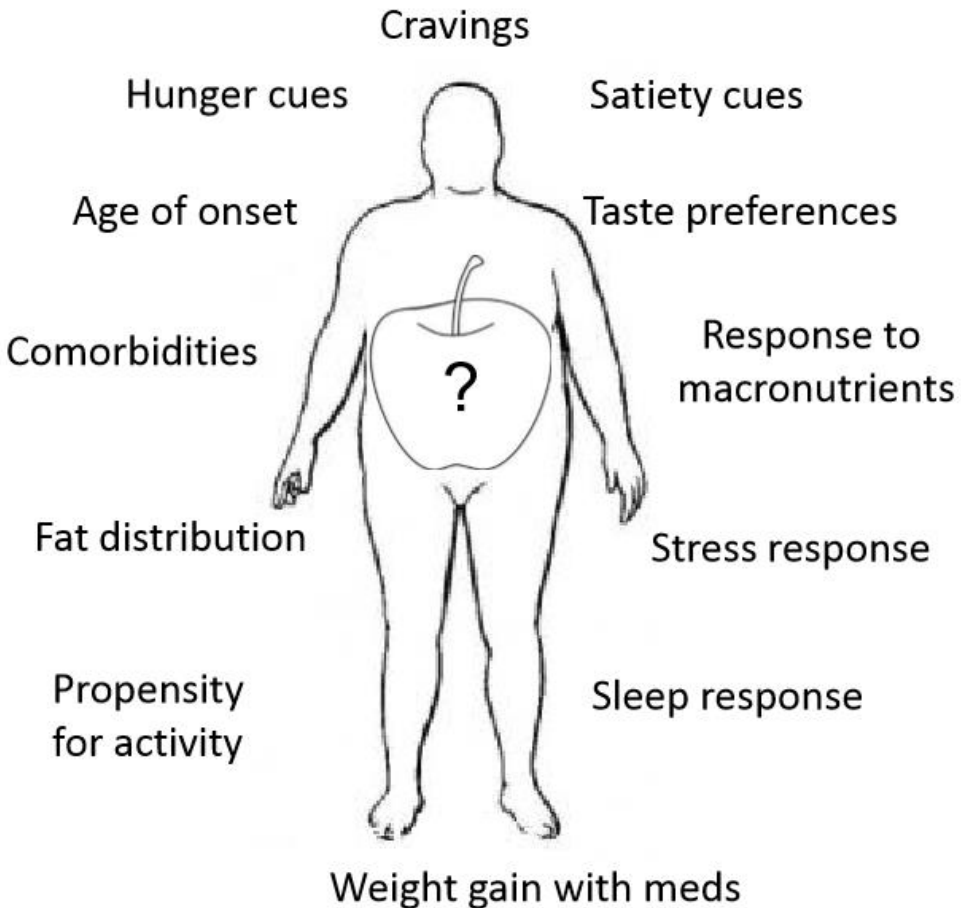
Neoplastic

Psychological

236

**comorbidities
affecting EVERY
organ system and
medical specialty**

Multiple Types of Obesity (“The Obesities”)



What is the basis of this heterogeneity?

- **Variable patient biology**

- Sources of variation



- Different obesity-predisposing Genetics (900 loci associated with elevated BMI)
 - Some genetic alleles protective against obesity (e.g., ALK gene)
- Different developmental exposures
- Different environmental exposures

Summary

- Obesity is **complex** and **heterogeneous**
- Obesity prevention, assessment, and treatment should include understanding of
 - 1) Etiology of obesity
 - 2) Complications and risk
 - 3) Barriers and Modifiers to prevention & treatment
- Therapeutic algorithms (prevention measures, lifestyle, pharmacotherapy, surgery, etc.) **MUST** be determined based on the above.
- Access Obesity and COVID fact sheet on MPHA's website

PUBLIC HEALTH APPROACHES TO ADDRESSING OBESITY

Tara Whiton, PhD

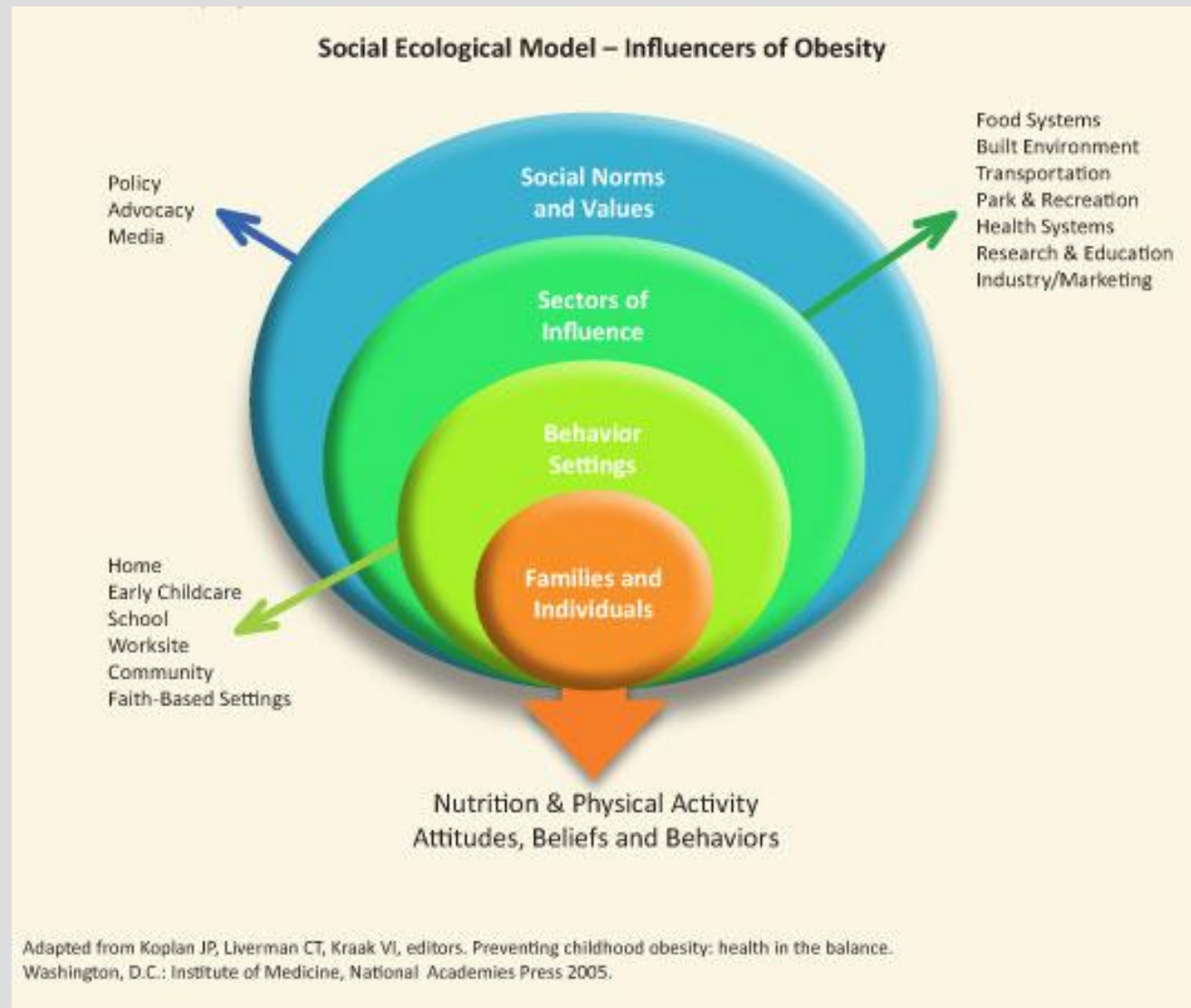
Assistant Professor of Community Health

University of Maine at Presque Isle



University of Maine at
PRESQUE ISLE
North of Ordinary

INFLUENCERS OF OBESITY



Renee Page, MPH, PS-C, CLC

Executive Director
Healthy Communities of the Capital Area
Gardiner, ME
serving southern Kennebec County



Maine Obesity Advisory Council

www.maineobesityadvisorycouncil.org

1. Increase Consumption of Healthier Food & Beverages
2. Decrease Consumption of Less Healthy Food & Beverages
3. Increase Physical Activity
4. Increase in Initiation & Duration of Breastfeeding
5. Increase cross-sector Coordination & Collaboration



**healthy
communities**
OF THE CAPITAL AREA
making connections ~ improving lives

Examples of Local-Level Work

- Nutrition Education
- Organizational Policies
- Changing Environments
- Access to local food
- Network building & collaboration



Needs & Recommendations

- ✓ Support consistent statewide strategy implementation with adequate funding, capacity building, and strengthened public health infrastructure
- ✓ Community-level primary prevention for adults
- ✓ Priority Setting
- ✓ Systems Approach



Becca Boulos, MPH, Ph.D.

Executive Director
Maine Public Health Association



State-Level Policy Recommendations

- **Support consistent funding** for obesity prevention and management, building on existing efforts: SNAP-Ed, *Let's Go!*, State Nutrition Action Council, WIC & Head Start.
- **Improve monitoring of obesity prevalence and obesity-related chronic diseases** among youth and adults. Collect, analyze, and report data disaggregated by age (particularly for youth), race, ethnicity, gender, disability, geography, and other demographic factors.
- **Increase accessibility of electronic health record data** on obesity.
- **Improve evaluation** of obesity-related community programming and outcomes, including assessing the cumulative effect of federal, state, and private funding.
- **Engage local entities** in obesity prevention efforts. Community-led priority areas should drive equitable resource allocation.

For every \$1 spent on evidence-based disease prevention programs we save \$5.65 in health spending and get back \$7.50 in economic output.

Questions?

A recording will be posted at: <https://bit.ly/2OR4dcY>

Fact sheet available: <https://bit.ly/2OOPcrW>

This presentation is the first in a series of presentations on obesity. Please look for more information to come.

For more information contact: mainepha@gmail.com

Definition Feedback

Obesity is a complex, chronic, relapsing disease where excess body fat leads to physiological impairments. The disease of obesity increases the risk of developing other chronic diseases and is associated with early mortality and reduced quality of life.

