



FOODS-C: A 3-YEAR INTEGRATED OBESITY CURRICULUM FOR MEDICAL TRAINEES



TOURO UNIVERSITY

San Francisco, CA

Medical educators designed the *Fundamentals for an Osteopathic Obesity Designed Study (FOODS)* curriculum to provide a longitudinal, progressive delivery of the provider competencies for the prevention and management of obesity. The *FOODS* curriculum was integrated over 3 years of medical training and resulted in an improvement in students' attitudes toward and knowledge of obesity. This program could also be integrated into the pre-licensure training of physician assistants, nurse practitioners, and physical therapists.

SCENARIO

Medical professionals' awareness of their important role in defusing the obesity epidemic has increased. However, many practitioners demonstrate bias against people with obesity, and the number of practitioners who treat obesity problems continues to be low. In 2011, after the United States failed to achieve the Healthy People 2010 obesity goals, the American Osteopathic Association House of Delegates passed Resolution 435A, stipulating that all Doctors of Osteopathy (DOs) should address obesity in their practice.

Leaders from TUCOM responded by implementing the *Fundamentals for an Osteopathic Obesity Designed Study (FOODS)* curriculum, designed to prepare the osteopathic physician to appropriately engage the patient with obesity in order to optimize health care delivery. Program targets include:



1 Undergraduate medical education: develop a comprehensive series of obesity-related learning modules to increase student obesity knowledge and reduce weight bias.



2 Graduate medical education: distribute e-learning version of the curriculum for residency programs and other schools to integrate, possibly with flipped classroom format.



3 Clinical Outcomes: evaluate whether improved training and education on obesity improves clinical health outcomes for patients with obesity.

About the Educators



College of Osteopathic Medicine (TUCOM)

Departments of Basic Sciences & Clinical Education

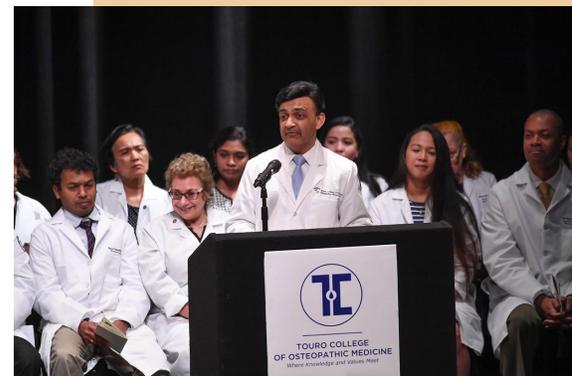


Michael Clearfield, DO

Greg Gayer, PhD
(greg.gayer@tu.edu)

KEY COMPETENCIES:

Disparities/Inequities in Care
Integration of Community Care
Language for Obesity
Strategies for Patient Care
Weight Bias & Stigma



CURRICULUM

The FOODS curriculum includes 27 obesity-related modules delivered longitudinally over 3 years, provided as a series of lectures during the first and second years and by online case simulations in the third year. All obesity modules were integrated into broader courses or as part of clinical clerkship requirements. Learner weight bias was assessed each year.

YEAR 1

6 hours

series of 19 in-class, interactive sessions to improve core knowledge of obesity + knowledge exam

Primary Topics Covered in Modules 1-27

- epidemiology of obesity
- pathogenesis & metabolic factors
- nutrition, diet, & physical activity

Additional Topics (Year 1)

- obesity as a disease and associated chronic conditions (diabetes, hypertension, infertility, hepatic steatosis, sleep apnea, cancers)

YEAR 2

4 hours

series of 8 in-class, interactive sessions to review new findings and reemphasize selected topics + knowledge exam

Additional Topics (Year 2)

- self-control & behavior modification
- pharmacologic & surgical therapies
- interaction through inflammation between obesity, metabolic abnormalities, and climate change
- osteopathic approach to managing obesity

YEAR 3

self-paced

virtual case presentations covering obesity issues required in core rotations (delivered using Aquifer, formerly MedU)

Case Examples

- Pediatrics
8-year-old male well-child check
- Surgery
bariatric surgery module
- Internal Medicine
45-year-old man with obesity
- Obstetrics / gynecology
45-year-old woman wellness visit

OUTCOMES

Participation in the curriculum was associated with significant increases in medical knowledge and a significant reduction in bias sustained throughout all four years of training. Compared to peers who did not complete the FOODS curriculum, students who completed the first year of the obesity curriculum (n=528) showed significantly greater medical knowledge regarding:

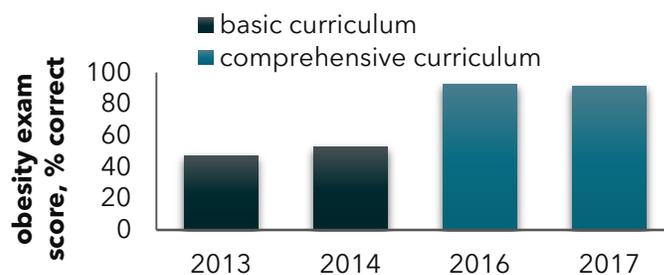
- ✓ obesity as a disease (etiology and epidemiology)
- ✓ nutrition, physical activity, and behavior modification
- ✓ pharmacologic and non-pharmacologic interventions for obesity and associated chronic disorders

The FOOD team includes clinicians, basic scientists, nutritional experts, and public health experts working interprofessionally to ensure continued sustainability.

Methods of assessment:

- ✓ Obesity knowledge exam (30 questions, multiple choice)
- ✓ Pre/post weight bias survey (Fat Phobia Scale)

Medical student scores on year-one obesity examination, basic vs. comprehensive curriculum



J Am Osteopath Assoc. 2017;117(8):495-502.



With an improved diet, we can get measurably healthier in just 7 to 10 days. From an osteopathic perspective, we need to acknowledge the importance of those small steps so physicians don't give up on patients and patients don't give up on themselves.

– Dr. Michael Clearfield, Dean of TUCOM



Additional outcomes data and information about this curriculum are available from:

J Am Osteopath Assoc 2017;117(8):495-502. doi: 10.7556/jaoa.2017.099

