



Metabolic and Demonstration Kitchen

CORE SERVICES

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Overview

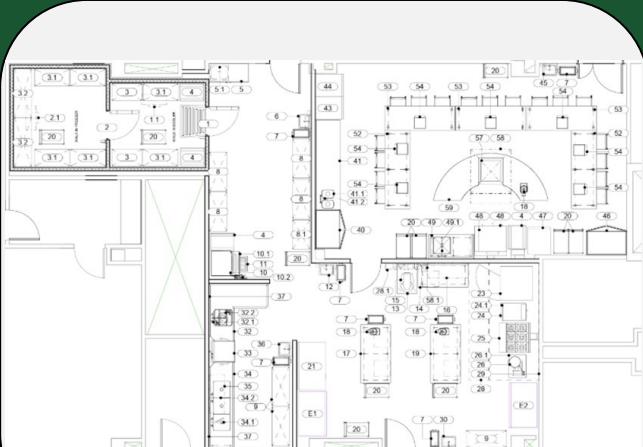
- The metabolic kitchen is designed to deliver clinically controlled meals, support multidisciplinary research, and promote hands-on learning and capitalize on emerging opportunities in the market.
- Registered dietitians engineer and implement controlled dietary interventions by sourcing, storing, preparing, cooking, dosing, and providing all meals to research participants. Precision diet formulation enables controlled macro- and micro-nutrient manipulation.
- Research staff produce pharmacy-grade meals to ensure accurate energy balance intake.

- The demonstration teaching kitchen supports live, recorded, and hands-on classes, demonstrations, and laboratory activities. A state-of-the-art audiovisual system enables instructors to teach the principles of Food Is Medicine while allowing participants to immediately apply that knowledge through preparation of health-promoting and medically tailored meals.



Core Collaboration

BAI NORC Core
UAB DNS Metabolic Health Clinic
UAB DNS Whole Room Indirect Calorimetry Suite
UAB School of Nursing
UAB Dept. of World Languages & Literatures
Viva Health
UAB Tv
UAB Student Media
Blazer Kitchen



Current/Planned Grants and Programs

Current

- Low-carbohydrate diets for weight loss maintenance following discontinuation of new anti-obesity medications: Impact on energy intake and expenditure (KETO-WEI)
- Effect of Time-Restricted Feeding on 24-Hour Glycemic Control, Blood Pressure, and Cardiovascular Disease Risk Factors in Adults with Prediabetes (MEAL TIMING)
- Using Early Time-Restricted Feeding and Timed Light Therapy to Improve Glycemic Control in Adults with Type 2 Diabetes (CLOCKS)
- Time-Restricted Eating and Cancer: Clinical Outcomes, Mechanisms, and Moderators
- Nutrition for Precision Health (NPH)
- Gastrointestinal Oxalate Absorption in Calcium Oxalate Stone Disease (GIA)
- Endogenous oxalate synthesis in idiopathic calcium oxalate kidney (OSS)
- Oxalobacter formigenes colonization in calcium oxalate kidney stone formers (OCK)
- Sleep and Circadian Contributions to Nighttime Blood Pressure Rhythms (SCN-BP)
- Flavors of the World: A Cultural Cooking Series - Student Engagement Grant through the College of Arts and Sciences, the Department of World Languages and Literatures
- Herb and Spice Study

Planned

- R01 Colonization of Volunteers with Oxalobacter formigenes Post Roux-en-Y Gastric Bypass surgery (BAR)
- R01 RT-SM-IMDs - resistance training (RT) alone, or combined with a protein diet (PRO), can minimize the loss of skeletal muscle (SM) seen with incretin mimed drugs (IMDs) (semaglutide and tirzepatide) in older adults with obesity.
- R01T1DM_Std.CHO_LowCHO_Med
- 24-hour recalls to assess glycemic load, total carb, processed carb, added sugar, total sugar
- Ketogenic feeding in patients with community-acquired pneumonia (CAP)
- SBIR "Ketone IQ™: An Exogenous Ketone Supplement as a Metabolic Adjuvant for MASLD."
- CHAMPS
- Acute Modulatory Role of Whole Grape Polyphenols on Room Calorimetry Derived
- Respiratory Exchange Ratio and Mitochondrial Function in Obesity
- Activating UAB's Metabolic and Teaching Kitchens: Launching Scalable Culinary Medicine, Research, and Education Programming

Programs and Events

- Cooking classes, cooking demonstrations, dietitian engineered meal program, food waste sustainability program