

Meals and Feeding Studies with the CTRC



CONTACT CTRC BIONUTRITION UNIT

To learn more about the
Bionutrition Unit:

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RESEARCH MEALS & FEEDING STUDIES

Bionutritionists are experienced in the design and implementation of test meals and research diets to provide a specific nutrient composition for a study. The Bionutrition Research Kitchen is specially equipped, and the staff is highly trained to prepare and serve meals and to document their consumption. Test meals of specific nutrient composition can be served on a timed schedule. Research meals can be served to a CTRC inpatient or outpatient or can be packed and eaten in other clinics on campus or sent home with a participant.

The Bionutrition Unit is especially skilled at the long-term provision of research meals to participants, also known as feeding studies. In a feeding study, meals are packed and sent with participants for home consumption for any length of time, from days to months. Diets can be designed for weight management, gain or loss, with regular monitoring and adjustments by bionutritionists to ensure goals are met. An ad-lib feeding study, where food in excess of the participant's weight maintenance needs is provided, can measure the effect of a diet on food consumption.

The Bionutrition Unit's work designing recipes and menus for feeding study participants has resulted in both academic publications and commercially available cookbooks, including [The FOoD Kitchen](#), containing recipes for those with long-chain fatty acid oxidation disorders, and the [Pacific Northwest Anti-Inflammatory Reference Cookbook](#), with recipes based on a naturopathic anti-inflammatory diet developed for use on a feeding study and modified for home use.

MEALS FOR RESEARCH PARTICIPANTS

Inpatient meals are provided by [OHSU Food & Nutrition Services](#) if the participant is not on a research diet. The Bionutrition Unit does not provide food for outpatient research participants, but please contact the Bionutrition Manager if you have a special circumstance or would like to discuss other options for your study participants.

WHY USE CTRC BIONUTRITION MEAL SERVICES?

A 2017 analysis examined the consistency of room service meals delivered to the unit by OHSU Food & Nutrition Services. It showed that only 7 out of 15 meal trays arrived within a window of +/- 10 minutes of the requested delivery time. The remaining 8 meals arrived at times ranging from 1 hour early to 20 minutes late. Meals arriving early must be held and will either be served at an undesirable temperature or will require nursing time to heat them up. Meals arriving late can disrupt the timing of study procedures. Further analysis of the nutrient content showed that only 7 of our 18 food items contained within 10% of the expected grams of carbohydrates. The remaining food items ranged from -40% to 99% of the expected grams of carbohydrates. This variance can impact studies for which differences in carbohydrate intake may affect study data.

For studies needing precisely timed meals with accurate nutrient content, the Bionutrition Unit is the best option.