## **Abstract Title**

Improving the accuracy of measuring oral food and fluid intake of adult patients in acute care M. Gillam<sup>1</sup>, C. Basualdo-Hammond<sup>1</sup>, M. Atkins<sup>1</sup>, S. Buhler<sup>1</sup>, M. Tom<sup>1</sup>, S. Rendall<sup>1</sup>, L. Driedger<sup>1</sup>, C. McConnell<sup>1</sup>, C. Micholuk<sup>1</sup>, L. Gramlich<sup>2</sup>, M. Kothandaraman<sup>3</sup>. <sup>1</sup>Alberta Health Services, <sup>2</sup>Division of Gastroenterology, University of Alberta, <sup>3</sup>Division of Hepatology and Gastroenterology, University of Calgary

## Abstract

Purpose: To identify an effective and practical method to evaluate patient food consumption for patient care and clinical decision making and evaluation of malnutrition interventions.

Process: Patients were randomized to (1) tray ticket (TT) (% of each foods eaten is recorded), or (2) modified My Meal Intake Tool (MMIT) group (proportion of meal consumed is recorded). Patients self-recorded their 3-day food consumption. Food records of 6 meals per patient were compared to weighed food intake for accuracy. Each patient completed a satisfaction survey upon study completion. Each method results were evaluated for accuracy, feasibility, ease, appropriateness for use, and workload impact. Results were discussed by Dietitian, Management and Researcher focus groups.

Systematic Approach Used: Seventy-two (72) patients from two hospitals completed the study. Ninety percent (90%) of patients self-recorded their food intake; patients reported that recording intake took minimum effort and time. Based on comparison to the weighed food method, TT was more accurate than MMIT in total meal calories (88% vs. 40%) and protein (75 % vs. 52%). All focus groups preferred TT and made suggestions to improve TT method's data collection process and completeness of between meal foods.

Conclusions: TT is a patient-friendly tool that provides an accurate measure of patient food consumption. Collaboration between nutrition, food services and other health professionals may improve the data collection process, thus maximizing TT's potential.

Recommendations: Next step is to study ability to have other staff (e.g. nurses or food service workers) use TT tool to record intake of patients who are unable to do so.

Significance to the Field of Dietetics: Dietitians require accurate measurement of food intake to provide optimal patient care and for evaluating malnutrition interventions. This study has shown the TT tool is accurate in providing this required information.