Monitoring

Why do we need to monitor nutrition in hospital?

Poor food intake, even in a well-nourished patient, can extend the hospital stay. As with body weight, this is a 'vital statistic' to understand how the patient is recovering. Obtaining body weight at admission and weekly during the hospital stay is considered a standard of care for all patients. Weight can change quickly due to fluid loss or gain. A rapid weight loss can be an indication of dehydration (unless the patient is edematous), which can cause serious consequences such as delirium, adverse drug reactions and even death. Immobility can also result in rapid loss of muscle tissue, especially if a patient is unwell.

Food Intake Monitoring

Malnutrition can develop quickly in hospital, so it is important that food intake monitoring occurs for all patients. Poor food intake, even in a well-nourished patient, can extend the hospital stay. The My Meal Intake Tool (MMIT) has been developed and tested with older patients, and can be completed by those with adequate cognition, by family or a staff member. Other food monitoring tools are also available for use. The key is ensuring that when poor food intake is identified, action is taken to improve intake.

How do I measure food intake?

> *"If the patient's eating poorly then you need to do something about it. It's not just writing it down and not doing anything about it. ... this way there is a next step to follow, so that should be affecting the patients."*
>
> - Focus Group Participant

Low intake is typically defined as ≤50% of the tray. A variety of methods can be used for food intake monitoring. Many hospitals will already have some form of food intake monitoring (e.g. nurse flow sheets, vital stats reports, etc.), so the focus should be on making sure the form is completed regularly, the portion of food consumed is recorded accurately, and that low intake is connected to an action. One option of monitoring is the My Meal Intake Tool (MMIT). The MMIT has been developed and tested for use with older patients, and can be completed by patients with adequate cognition, family or a staff member.

If it is decided that staff will complete (rather than the patient) food monitoring, education of staff about portion size estimation is particularly important. Pictures of portions of food and beverages consumed are helpful for training and as cues when posted in patient rooms. Education can take many forms including a presentation, reviewing tools, and working with individual staff members on the necessary steps in the process. Remember to include training on what to do with the information on low intake, whether it is recorded from

MMIT or nursing documentation. There is no point in monitoring food intake if an action to improve intake does not occur!

How do I connect food monitoring to treatment?

Communication of low food intake is necessary. Work with staff members that are assessing food intake to develop buy-in and then build a process that feasible for improving practice. The key to implementing a food intake monitoring process is to train and motivate staff so they understand the importance of this function, and they can accurately monitor intake and connect low intake to an appropriate action to address the reason for low intake. Low intake does not always mean a referral to a dietitian is necessary. For example, if it is identified that the patient does not like the food, the appropriate action is accommodating food preferences; or if pain is the reason for low intake, pain management strategies should be considered.

Models for Food Intake Monitoring

The following are examples of food intake monitoring used in the More-2-Eat Study and actions taken to respond to low intake.

Who does the monitoring?	What tool is used?	What values are used?	Who and how is action taken for low intake?
Nurse	Nurses Charting /Vital Signs Form	0, 25, 50, 75, 100%	Nurse: refers to dietitian /diet technician when intake is consistently ≤50%. This is charted and discussed in clinical rounds. Dietitian also reviews vital signs forms for intake.
Food Service Workers (nurses if they move the tray)	Food monitoring section of the whiteboard in each patient's room	0, 25, 50, 75, 100%	Low intake is documented on the whiteboard and then transferred to the chart and discussed at bedside rounds every day.
Health care aides (or other unit staff who picks up the tray)	a) Patient Meal Intake Record (for 7 day period) on each patient's door that is later included as a permanent part of the patients medical chart.	0, 25, 50, 75, 100% or NPO	Intake recorded 3 meals daily for entire admission. If ≤50% is consumed, the person retrieving the tray asks the patient 2 questions (about appetite and mealtime challenges), records patient responses and corrective action taken by the relevant person. Dietitian is consulted if intake is

	b) Laminated reference meal tray poster (with photos of meal trays with standardized % consumed) on wall in each patient room to guide tray assessors.		≤50% for at least 2 meals/day for 3 consecutive days. Dietitian also reviews intake record.

Weight Monitoring

Weight monitoring involves taking patient weights and tracking the weights regularly throughout the duration of the hospital stay. This vital statistic is necessary for physicians, dietitians, pharmacists, social workers, occupational therapists, physiotherapists, and nurses, in order to make appropriate decisions about various treatment modalities. Weekly weights should be considered routine care for all hospital patients.

How do I start regular measurement of body weight during hospitalization?

> *"Honestly, at first, of course, we were kind of overwhelmed* [to do weekly weights]. *But now I think it's getting better."*
>
> - Focus Group Participant

Obtaining an admission weight and routine monitoring of patients' weight throughout hospitalization is a standard care practice. If admission weight is not done, start with educating staff on the importance of this objective measure to the care and recovery of the patient. Getting regular weights during hospitalization can be difficult and there will likely be resistance from staff. However, once started, most staff recognize it does not take long, and is fairly easy to do. It is important to stress the benefits of actual patients' weight for many of health professionals caring for the patient. Having appropriate equipment available is also important (i.e. chair scale). Making weights a routine, such as having a "weigh day" for all patients on the unit, or encouraging friendly competition, is important for sustainability.