Nutrition Educational Booklet for Families



Feeding Your Family Member in the Intensive Care Unit

Your Family Member is 'at risk'!

Many hospitalized patients are malnourished or do not receive enough nutrition to meet their needs. This results in increased complications, longer lengths of stays, a longer recovery period and increased risk of death. Providing enough nutrition is often difficult to do in the ICU and when the patient is discharged to the ward. We need your help in order for you to ensure your loved one receives proper nutrition.



This booklet contains information about:

- The risks of malnutrition and underfeeding
- Nutrition therapy and how it helps
- The different types of nutrition therapy used and how they are given

By providing this information and giving you some questions you can ask the health care professionals involved in the care of your family member, we hope you can help us provide optimal nutrition to your loved one.

What is nutrition therapy and how can it help?

We recognize there are many other things you are worried about regarding the care of your loved one. However, nutrition has the ability to improve one's condition and recovery in hospital. It is considered a therapy, much like medications and other treatments, and it needs to be optimally delivered.

Optimal nutrition therapy means giving people the correct amount and type of nutrition. This helps by:

- improving wound healing
- boosting the immune system

- reducing the risk of infection
- helping the stomach work better
- reducing chances of death
- reducing length of hospital stay
- improving physical recovery of survivors

While in the ICU, your family member may be on a mechanical ventilator (breathing machine) to assist them with their breathing.

While they are on the machine they will not be able to eat or drink and will have nutrition provided by a special liquid. The liquid contains protein, carbohydrates, fats and vitamins and minerals. It provides a balanced diet for your family member.



How nutrition therapy is given

Your family member may receive:

- Tube feeding
- Intravenous (IV) feeding,
- Combination of both tube and IV feeding

1) Tube Feeding

Tube feeding is where the liquid is given through a tube that goes directly into the stomach or bowel. It is used if the stomach and bowels (intestines) are working normally. This type of nutrition follows the normal path of digestion.

Tube feeding is part of the standard care in all ICUs.

At first your family member may need to have all of the nutrition through a tube. When their breathing tube is removed, their feeding tube may also be removed and they may be able to eat some food by mouth. However, many patients are still too weak and tired to eat well by mouth. Before your family member's breathing tube is removed, you can discuss with the doctor if the feeding tube can be left in until they are able to eat at least 50% of their meals.

Side effects of tube feeding

If the patient's stomach is not emptying properly, tube feeding may result in:

- gastric reflux, which means the contents of the stomach move backwards into the food pipe
- aspiration, which means the contents of the stomach enter the airway and lungs

These side effects can lead to problems such as pneumonia.

How are the risks of tube feeding prevented?

The health care team takes steps to help reduce the risks by:

- monitoring the volume of the stomach contents
- raising the head of the bed
- moving the feeding tube further into the bowel
- giving medication to help the stomach empty faster, if needed



About nutrition formulas

There are many types of formulas to choose from. The dietitian selects the best one for your family member. This depends on their medical condition and needs. #

Each person's nutrition needs are assessed in the ICU. The following decisions are made by the dietitian/medical team regularly:

- ✓ the best way to give nutrition
- ✓ the type of formula
- ✓ how quickly the formula should be given. Most often, the formula is given over 24 hours
- ✓ when to start eating food orally

2) Intravenous (IV) feeding

This type of nutrition is given by a thin tube going into a blood vessel (vein). Your family member may already have one of these types of tubes in for other treatments.

This type of nutrition does not follow the normal digestive system.

Your family member may need IV feeding if:

- they have severe stomach or bowel problems
- the stomach and part of the bowel are removed
- there were nutritional problems before surgery and your family member could not manage tube feeding
- there is a hole in the stomach or esophagus
- your family member is not able to receive enough nutrition with tube feeding



The solutions used are complex and carefully made up by pharmacists during a sterile manufacturing process. Doctors and dietitians advise the pharmacist about your family member's specific nutritional needs.

Your family member is monitored closely while having IV feeding. Your family member may have blood tests done each day to check how well the nutrition is meeting his/her needs.

IV feeding can have side effects such as causing high blood sugar or liver problems, and these are carefully monitored.

How can you help in the ICU?

Be prepared to answer questions about your family member's nutritional status before the illness, such as:

- What is his/her height and usual weight?
- Has there been any recent weight loss?
- Had your family member been eating normally over the past week or was there a loss of appetite?

2 to 3 days after nutrition has been started in the ICU ask the nurse if your family member is getting enough nutrition, such as:

- Are they being fed?
- Have they had any side effects from the feedings?
- Are they getting at least 80% of their nutrition needs?
- Should the head of the bed be raised?

Starting Oral Nutrition

When your family member is able to breathe on his/her own, the breathing tube will be removed. Nutrition is a critical part of this rehabilitation process following critical illness.



Once the breathing tube is removed and your family member is awake and can swallow safely, he/she will be encouraged to begin eating and drinking. This is a good time to connect with your family member's doctor, nurse and/or dietitian regarding the nutrition plan. Knowing the nutrition plan and goals may help make the transition from ICU to ward and beyond go smoother.

Some people may not be able to eat regular food or drink liquids due to swallowing problems. The medical team may ask that a swallowing specialist (speech language pathologist) see your family member to figure out the safest consistency of food for them to eat. If your family is prescribed a special diet to help with swallowing please do not provide them any food other than what is supplied by the hospital as this may not be of the correct consistency and can be dangerous.

Your family member's doctor and/or dietitian will decide when to remove the feeding tube or stop the IV feeding. Some patients will continue to get a reduced amount of nutrition through the tube as they begin to eat and drink. Research shows that patients who eat <50% of their food in hospital are at a greater risk of staying in the hospital longer and being readmitted to hospital. It may be helpful to leave the feeding tube in until your family member is eating at least 50% of their meals. This way, tube feeding can continue until your family member is eating enough on their own.



Most patients will start drinking first, and then solid foods will be added to their diet. Even if they are only drinking, their calorie and protein intake can be increased by drinking nutrient dense beverages, such as oral nutrition supplements and whole milk. Oral nutrition supplements are liquid beverages that contain calories, fat, protein, vitamins and minerals that can be used to supplement or replace meals. They are dense in calories and can be milk or juice based and come in a variety of flavors. They have been shown to reduce chances of nutrition-related complications, reduce hospital stay and reduce chances of being readmitted to hospital. We strongly encourage patients recovering from critical illness to drink these oral nutritional supplements.

Transition to the Ward

Common side effects after critical illness that may affect nutrition are:

- Low appetite and/or feeling full early
- Taste changes
- Fatigue and/or poor sleep
- Weakness
- Delirium
- Low mood

When your family member is transferred to the ward, there will be less contact with members of the health care team. In the ICU, one nurse may be assigned to 1-2 patients. On a hospital ward, one nurse may be assigned to 6 or more patients. You can help the health care team by monitoring the nutrition intake of your family member and advocating for best practice. Your role will be more important on the hospital ward than in the ICU. Ask your family member and/or the nurse if they are getting enough nutrition, such as:

- Are they eating at least 50% of their meals?
- Ask the nurse, dietitian or speech language pathologist what foods are safe for them to eat.
- Have they eaten any additional food not provided by the hospital?
- Have they had any problems eating while in hospital?
- Are they receiving oral nutrition supplements? Are they drinking them?

Steps you can take to help improve your family member's appetite and nutrition intake include:

- Requesting 6 small meals per day (or 3 meals and 3 snacks) rather than 3 large meals a day
- Including oral nutrition supplements with meals and snacks
- Requesting energy dense foods and adding energy dense items to food (eg. add butter to pasta, put butter and peanut butter on toast)

- Asking the medical team if you can bring food in from home (if there are no swallowing risks)
- Providing encouragement at meal times to make eating a social, enjoyable time. Bring food for yourself and eat with your family member.
- Informing the health care team of your family member's food and drink likes and dislikes
- Record the amount they eat and share that information with their doctor and dietitian, if you are concerned



If you are concerned at any time that your family member is not receiving enough nutrition, please ask to speak with the nurse or dietitian.

Contact name:	
Contact number:	-

My Questions and Notes: