

Artificially Administered Nutrition and Hydration

For Healthcare Professionals

What is artificial nutrition and hydration?

Artificial nutrition and hydration is a medical intervention that allows residents to receive nutrition and hydration when they are unable to eat or drink adequate amounts. It can be given intravenously (through an IV), subcutaneously (through the skin) or through a tube placed in the stomach or intestine.

When is it given?

Artificial nutrition and hydration is given when a resident is unable to eat or drink enough to sustain life or health. This could be a result of difficulty swallowing (dysphagia), illness or injury, surgery, or advanced chronic disease. If the resident can safely swallow, food and fluid should always be offered.

Who does it help?

Artificial nutrition and hydration works well when a resident is relatively healthy and needs it for a short time to recover from an illness or injury. It helps to improve the healing process. Artificial nutrition and hydration may also be given when a resident's nutritional requirements have increased, such as persons with severe burns. Some residents who have lost the ability to eat and drink safely may want a feeding tube to provide artificial nutrition and hydration long term; however, this alone will not reverse or change the course of the disease.

Who is it less likely to help?

Artificial nutrition and hydration does not work as well for residents who are older and frail or weak from chronic health problems. Residents with advanced dementia are another group who are less likely to benefit, as a loss of the ability to chew and swallow is a natural part of the disease progression. Residents near the end of life also lose the desire to eat and do not benefit from artificial nutrition and hydration.

How is it given?

Artificial nutrition and hydration can be given intravenously, through a tube inserted through the nose into the stomach (nasogastric or NG tube), through the abdominal wall into the stomach (gastrostomy, G-tube, or PEG tube) or into the intestine (jejunostomy or J-tube). Insertion of the tube into the stomach or intestine requires a surgical procedure. Fluids with limited amounts of nutrients can be given intravenously. In some situations, fluids can also be given subcutaneously. If artificial nutrition and hydration is given long-term, a surgically implanted tube is generally used and has fewer side effects.

What are the risks and side effects?

Medical complications such as a blood infection, skin damage at the site of the tube, pneumonia, aspiration, fluid and electrolyte imbalances, and edema can occur. Uncomfortable symptoms such as nausea, vomiting, diarrhea, cramping, bloating, and shortness of breath may also occur. Psychological complications include decreased human contact and a loss of the pleasure of eating. Most medical experts agree that artificial nutrition and hydration increases suffering for those at the end of life who no longer have interest in eating or drinking. Although artificial nutrition and hydration is used when a resident has difficulty swallowing, it may increase the risk of aspiration and pneumonia in certain conditions such as advanced dementia.

Can artificial nutrition and hydration be stopped once it has started?

Yes. Just like with other medical interventions, it is legally and ethically acceptable to stop artificial nutrition and hydration if it provides no benefits or is unwanted. Sometimes, a feeding tube is used for a set amount of time to see if the underlying problem gets better. Removing a feeding tube allows the natural process of death to occur. The decision to use or withdraw artificial nutrition and hydration should be based on the resident's treatment goals and values. These values may include religious considerations or prior experiences.

Can artificial nutrition and hydration be given at the end of life?

It is natural for a resident to lose the desire to eat or drink at the end of life. Studies have shown that at the end of life, going without food or drink is not painful for the individual. Dehydration may even increase comfort as it can ease breathing and decrease respiratory secretions. If a resident is on a feeding tube, it may be necessary to remove it near the end of life if the body can no longer tolerate and process the artificial nutrition.

Supporting residents' and families' decisions

Artificial nutrition and hydration is a sensitive and difficult decision, especially if a family is not aware of what the resident would have chosen for him- or herself. It is important not to express judgment of the resident and family but should instead offer knowledge and compassion. Some cultural and religious traditions require use of artificial nutrition and hydration, so it may be helpful to encourage the involvement of religious faith leaders. In addition, the discussion of artificial nutrition and hydration often occurs at a difficult time such as the end of the resident's course of advanced disease. The topic should be approached with sensitivity and understanding that the resident and family may be grieving. A healthcare professional should provide guidance and support at this challenging time.