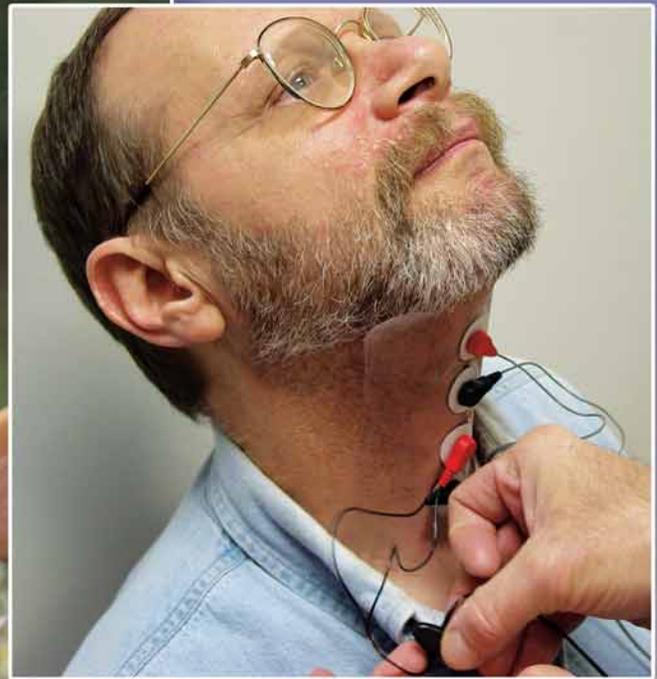


# VITALSTIM™ THERAPY

Despair to Hope...  
Restoring Life's Vitality!



For a person with dysphagia,  
this may be the answer...

[www.vitalstimtherapy.com](http://www.vitalstimtherapy.com)

1-800-447-6920

Chattanooga Group is the World Leader in the designing, manufacturing and distribution of physical medicine and rehabilitation equipment. For over 50 years, Chattanooga Group has accommodated the medical community with an impressive line of quality products from these five primary divisions:

The **Patient Care Division** encompasses the original Hydrocollator® product line alongside new ones, including the OptiFlex® line of Continuous Passive Motion devices - computerized versions of products designed to rehabilitate knees and shoulders after surgery.

The **Electrotherapy and Ultrasound Division** is responsible for Chattanooga Group being named the largest manufacturer of rehabilitative electrotherapy and ultrasound devices in the world. Key products in this category are the Intellect® Legend and the Vectra™ Series, the latest advancements in digital technology in the comprehensive line of electrotherapy and combination electrotherapy ultrasound systems.

The products in the **Physical Therapy Tables and Traction Division** show years of experience of Chattanooga Group working with clinicians and getting to know their problems and concerns in order to offer more effective, easy-to-use equipment. Their method of manufacture also adds to this sense of quality. Most of these products are created onsite, from raw materials to finished product.

The **Chiropractic Equipment Division** began with the design of a cost-effective, well-made table. The company has since expanded this line, and as chiropractic treatments become more accepted as rehabilitation modalities, the company is well positioned for growth in this market.

The **VitalStim Therapy Division** is the company's newest development. VitalStim™ Therapy is a new medical breakthrough used in the management and treatment of swallowing disorders. VitalStim is a specialized form of neuromuscular electrical stimulation that re-trains the pharyngeal muscles in the throat, essentially re-educating the functional muscle use patterns necessary to initiate or re-establish swallowing. VitalStim Therapy is revolutionizing the management of dysphagia. VitalStim Therapy has been cleared to market by the FDA for all ages and conditions of swallowing disorders except where contraindicated.

Chattanooga Group is a division of Encore Medical Corporation, based in Austin, Texas. By continuing dedication to research and innovation, Encore Medical and Chattanooga Group plan on providing the market demand with some of the most outstanding brands and quality merchandise well into the 21st Century.



# Coping with Dysphagia

Imagine spending the rest of your life without the feel of refreshing water on your lips. Imagine the loss if you could not taste a warm chocolate chip cookie or a spicy burrito, or enjoy a hot-off-the-grill steak. Imagine...

For dysphagia patients, this is not imagination. This is reality.

An estimated 15 Million people in the U.S. alone have a current diagnosis of dysphagia, with more than a million new cases occurring annually. Unfortunately each year, nearly 60,000 people die from complications associated with swallowing disorders.

What is life like with dysphagia? It is the drudgery of having all nourishment liquefied and forced into your body through a feeding tube in your stomach. It is the loss of fellowship when friends don't invite you to their homes for cookouts anymore. It's the embarrassment of having to find a place to discreetly use your feeding tube. It is the loss of the pleasure of sharing birthday cake with grandchildren, or the celebration at a wedding reception.

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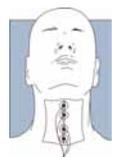
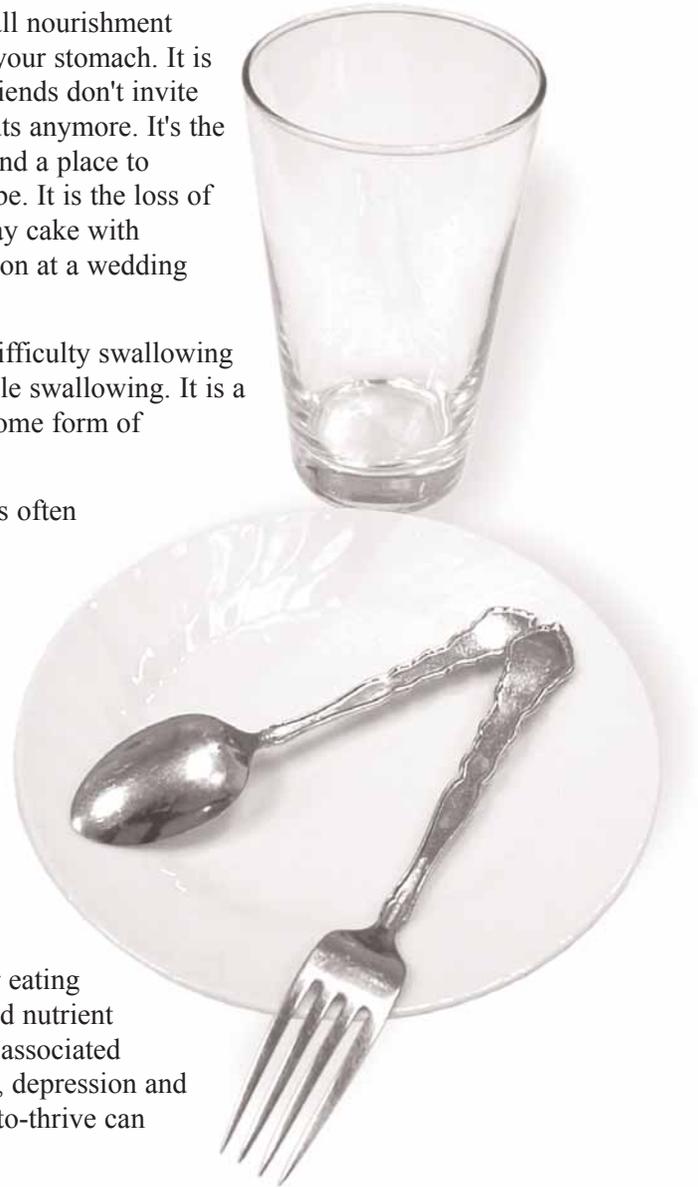
**...each year, nearly 60,000 people die from complications associated with swallowing disorders.**

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People with dysphagia have difficulty swallowing and often experience pain while swallowing. It is a growing medical problem, with one in 17 people developing some form of swallowing disorder in their lifetime.

From pediatric to geriatric, dysphagia is not limited to age. It is often associated with multiple diagnoses, conditions, and forms of debilitating neuromuscular diseases. One of the most common conditions is stroke. Almost 75 percent of stroke survivors develop some form of dysphagia. Of those patients who undergo radiation therapy as a result of head and neck cancer, approximately three-fourths will also develop dysphagia. Studies report over half of nursing home residents have some degree of dysphagia. If this debilitating condition is not properly managed, this can lead to aspiration pneumonia, chronic malnutrition, a decrease in quality of life and possibly death.

Dysphagia can cause the failure-to-thrive syndrome in both children and the elderly. In senior adults, dysphagia can hinder eating and result in social embarrassment, which can lead to decreased nutrient intake, involuntary weight loss and malnutrition. Other results associated with failure-to-thrive syndrome include inactivity, dehydration, depression and impaired immune function. In children, dysphagia and failure-to-thrive can be related in terms of poor weight gain, poor sucking reflexes, dehydration and malnutrition.



# VitalStim Therapy: Hope for Those in Despair

Few things in life can compare with the day-by-day hopelessness, loss of dignity and constant physical discomfort for a patient with dysphagia. VitalStim™ Therapy offers hope for the despair that marks every day for a dysphagia patient.

VitalStim Therapy is a new medical breakthrough used in the treatment of swallowing disorders. It is an active rehabilitation program, combining the physiologic benefits of neuromuscular electrical stimulation and volitional therapeutic programming. This new therapy incorporates a

**VitalStim Therapy has been cleared to market by the FDA for all ages and conditions of swallowing disorders except where contraindicated.**

specialized neuromuscular electrical stimulation system and uniquely designed surface electrodes to stimulate inactive swallowing musculature commonly found in patients with dysphagia.

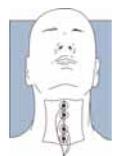
*Using VitalStim to activate key swallowing muscles allows clinicians to implement an active regimen of therapy to create or re-learn functional muscle use patterns necessary to initiate or re-establish swallowing.* Following a referral by a physician, VitalStim Therapy is administered by a medical practitioner certified in this treatment approach.

Currently traditional methods to treat dysphagia provide limited degrees of success. These include conventional speech therapy, patient education, swallowing maneuvers, and diet modification such as cutting food into small mouthfuls or pureeing food to make it pass more easily down the throat. Dysphagia is often managed medically through the use of a PEG (percutaneous endoscopic gastrostomy) tube. Patients with a PEG tube experience personal discomfort and a drastic reduction in the quality of their lifestyles due to the inconvenience of feeding tubes.

- Independent review and studies indicate this new, patented form of therapy has shown marked success in the outpatient world with a focus on patients with chronic dysphagia. In these studies, 71 percent of patients, diagnosed with dysphagia and experiencing cricopharyngeal dysfunction, progressed to swallow all consistencies of food with a combination of VitalStim Therapy and dilation.
- Success rates are even higher in cases of patients diagnosed with dysphagia without cricopharyngeal involvement.
- Some patients can expect to see dramatic improvement in six to 20 daily sessions... *sometimes in as little as three days.*



*The contraindications for VitalStim are specific to patients suffering dysphagia. Caution should be used with patients who have cardiac demand pacemakers. Its use is contraindicated with patients who are severely demented and exhibit non-stop verbalization. Constant verbalization could result in aspiration during trials of oral intake. VitalStim Therapy is also contraindicated in patients with significant reflux due to use of a feeding tube. Such patients are prone to repeated cases of aspiration pneumonia, and the VitalStim device has not been studied in this population. Use of the VitalStim device is contraindicated in patients with dysphagia due to drug toxicity. Patients suffering from drug toxicity could aspirate during trials of oral intake.*



# VitalStim Therapy Testimonials

## Desperation Led Them to Discover VitalStim™ Therapy

After several near-death experiences due to swallowing disorders, seven-year-old Bryce is a healthy first-grader who loves computer games, football and... eating hamburgers.

Bryce developed dysphagia shortly after birth. The cause of his condition has never been fully determined by doctors, who speculate that acid reflux was the reason. After multiple problems, Bryce was put on a feeding tube when he was two years old.

**“Bryce eats everything...  
Words can’t describe it!”**



After many consultations and examinations, doctors told Bryce's parents, Ron and Heidi Wegner, that nothing else medically could be done for their son. Their desperation led them to discover VitalStim Therapy.

The Wegners spent three weeks in 1999 at the University Hospital of Cleveland, Ohio. At the end of the treatments, Bryce was able to swallow normally. Although he still takes medication for acid reflux, today, "Bryce eats everything," says Mr. Wegner. "We see his recovery as a miracle. Words can't describe it."

## Outlook on Life Changed

Claire Ludwig was an active 65-year-old when she developed dysphagia in 1998 following a hemorrhagic stroke. Although told by leading specialists she would never swallow again, this feisty breast cancer survivor is proving medical experts wrong with the help of VitalStim Therapy.

Mrs. Ludwig's husband, William, sought the help of top experts who told them Claire would never be able to swallow. After trying an experimental program of electro-acupuncture, Claire did find some return of her swallowing capability,

**“She cried the first time she  
was able to swallow.”**

but the discomfort of the treatment led them not to return. Soon after, a nurse familiar with Mrs. Ludwig's case found VitalStim Therapy.

The Ludwigs spent 10 days in Cleveland in December 2002. After 10 treatments, Mrs. Ludwig passed a modified barium swallow test and took her first sip of liquid in four years. Today, her swallowing continues to improve and she enjoys restaurant dining... even eating steak!

"This has changed Claire's whole outlook on life," says Mr. Ludwig. "The more she tries, the better she gets. Until VitalStim, she fully expected she would never be able to take a drink of water again in her life. She cried the first time she was able to swallow. Now she can eat anything and know she is able to handle it."

## Miracle of the Cookie

Four-year-old Luke Dennin had never tasted food before he began receiving VitalStim Therapy. Birth defects resulted in a wide variety of medical issues, including dysphagia. He had known nothing but a feeding tube in his stomach since the day he was born.

Last December, Luke began receiving VitalStim Therapy. The act of eating was an incredible challenge for this 4-year-old. After a few sessions, he was taking small bites of food. With regular treatments involving the

**“For the first time, he was not  
dependent on a feeding tube.”**

painless, non-invasive VitalStim Therapy, Luke began to show dramatic improvement. For the first time in his life, he was not dependent on a feeding tube.

After six sessions of VitalStim Therapy treatment, Luke was enjoying a child's miracle of his first doughnut and an Oreo® cookie.



# Certification Helps Ensure Correct Treatment

Medical professionals must be certified to administer VitalStim™ Therapy. This ensures clinicians have achieved optimal treatment proficiencies for better outcomes.

The clinical guidelines used to define exact electrode placement begin with the reading of the Modified Barium Swallow study. Following appropriate electrode placement, stimulation output amplitude is set based on sensory tolerance of the patient and palpable clinical signs observed by the clinician. Sessions are just 60 minutes long and are repeated daily or tri-weekly until proper swallowing patterns are established.

Seminars are completed in two and one-half days, focusing on normal and abnormal swallowing patterns, anatomy, physiology, and the clinical understanding of surface neuromuscular electrical stimulation and its application to dysphagia. Additional topics covered in the course include medical reimbursement, developing a VitalStim Therapy program within your

**Seminars are completed in two and one-half days!**

facility and regional marketing methods directed towards the physician and patient market. The certification counts toward

your professional development (SLP, OT, PT) and in most cases covers all CEU requirements for the speech and language professional.

Certification seminars are currently being offered across the United States. The certification program is targeted as an intermediate - professional level course that provides 2.0 CEUs upon completion. For more information or to make reservations, please go to the website at [www.vitalstimtherapy.com](http://www.vitalstimtherapy.com), email: [info@vitalstim.com](mailto:info@vitalstim.com) or call 1-800-447-6920.



## Here's what clinicians are saying about the VitalStim Therapy seminar...

Medical professionals who have been through the VitalStim Therapy Certification program are finding the treatment affordable, easy to use and a life-changing experience for their patients. Comments from recent certification seminars around the country include:

**"This will revolutionize our treatment for dysphagia."**

**"Very impressive, would recommend this to my other colleagues."**

**"I have never gained so much knowledge that will directly affect my effectiveness in improving patient's quality of life, & regained excitement about my career choice. Excellent!"**

**"The course was outstanding! I'm excited to take the information that I have learned and the treatment approach of VitalStim and use with swallowing patients!"**

**"This was the most beneficial and interesting course I have ever attended. I called my boss at breaktime and I thanked her for letting me come to the course."**

**"I thought the workshop provided me with the information and skill needed to go to work on Monday and get started with VitalStim with confidence."**



# A Strategic Approach to Dysphagia

A new swallowing management program including VitalStim™ Therapy helps break an unsuccessful cycle of medical management, enabling patients faced with the despair of dysphagia to experience hope.

Dysphagia is prevalent in most medical centers and many have a larger number of patients with dysphagia than they may realize. In just the patient population suffering stroke, the 1999 Agency for Health Care Policy and Research (AHCPR) evidence-based practice report, suggests that almost 75 percent of hospitalized patients who have suffered a stroke will experience dysphagia. The enormity of the problem is expected to escalate as "baby-boomers" age and the onset of swallowing difficulties begins to manifest itself in greater numbers of the population. Dysphagia is a secondary complication from many conditions including stroke, traumatic brain injury, cerebral palsy, mouth or throat cancer, Parkinson's disease, Lou Gehrig's disease (amyotrophic lateral sclerosis, or ALS) and several other degenerative and muscular conditions.

Approximately 60,000 people die each year as a result of complications from dysphagia.

**Physicians** in all medical settings have to be sensitive to the complications of dysphagia. Unrecognized and unmanaged, dysphagia may lead to numerous and costly medical complications including dehydration, malnutrition, aspiration pneumonia, asphyxiation and even death. Some statistics report that only 22 percent of patients affected by dysphagia are referred for swallowing evaluation leaving PEG tube insertion as a primary medical intervention. *Questions one may ask the physician are; is it a lack of outcomes in traditional swallowing therapies that drive this or are physicians unfamiliar with the swallowing therapy profession?*

Estimated Annual Cost of VitalStim Therapy for total annual incidences

\$190,208,200 - \$380,000,000

Estimated Annual SAVINGS using VitalStim Therapy

\$2,281,100,952 - \$4,557,461,520

The **Rehabilitation Professionals** managing or implementing a swallowing disorders program are confronted with increasing case loads and less time to provide care than in the past. In long-term care facilities alone, statistics report that 55 to 75 percent of residents experience some degree of dysphagia, ranging from mild to profound. *This burden of increasing case loads and outcomes that do not progress the majority of cases to sustained oral intake are frustrating.*

**Hospital Administration** is burdened, as well as the economic liability for managing complications associated with dysphagia, such as aspiration pneumonia which can cost \$11,000 to \$15,000 per case. This figure compounds itself with repeat cases and

increasing patient loads. *Medical centers typically bear the cost of managing complications that occur while under their care.* Thus a greater awareness and a strategic approach in the medical management of dysphagia is an ever-increasing need.

A uniquely designed and FDA cleared to market neuromuscular electrical stimulation system called VitalStim Therapy, utilizes neuromuscular electrical stimulation through uniquely designed surface electrodes to stimulate inactive swallowing musculature commonly found in patients with dysphagia. Using VitalStim to activate the key swallowing muscles allows the clinician to implement an active regimen of therapy to create or re-learn functional muscle use patterns necessary to initiate or reestablish swallowing. VitalStim Therapy is an active rehabilitation program combining the physiological benefits of specific neuromuscular electrical stimulation and volitional therapeutic programs that can result in improved outcomes, improve a patients' quality of life, generate new revenues and significantly reduce the costs of care.

For a **Medical Center** the cost of VitalStim Therapy certification, equipment and supplies are low compared to conventional treatments for dysphagia. Certification in VitalStim therapy brings the security of knowledge and a quicker path to outcomes. Reimbursement has been established using conventional dysphagia and electrotherapy codes presently recognized by Medicare and other third part providers.

Annual Incidence of Patients who have suffered a stroke per year in U.S.A.

384,662 - 768,528

Number of Patients who have suffered a stroke and have dysphagia (74.6%) or 287,000 - 573,000

Annual Incidence Treatment for malnutrition in strokes resulting from dysphagia and PEG tube insertions (48.4%) or 77,636 - 155,110

Estimated Annual Costs

Treating a patient for an average of 14 sessions with VitalStim Therapy

\$2,532

Provided feeding with a PEG tube (per person)

\$31,832

Managing PEG tube treatment of all people with stroke-related dysphagia and its complications

\$2,471,309,152 - \$4,937,461,520



# VitalStim Product Information



The VitalStim Therapy device is a portable, dual channel electrotherapy system. It is used with electrodes specifically designed for application to the pharyngeal muscles of the throat to manage and help treat patients with dysphagia.

U.S. Patent No. 5,725,564

U.S. Patent No. 5,891,185

U.S. Patent No. 5,987,359

U.S. Patent No. 6,104,958

U.S. Patent No. 6,198,970

## 5900 – VitalStim Adult Product Package

- 1 Dual Channel Unit
- 1 Case of Electrode Application Kits  
(Adult sized - 10 kits per box / 10sessions)
- 2 sets of Lead Wires with Strain-Relief Clips
- Operation Manual
- Neoprene Protective Case
- Carrying Case

## 5905 – VitalStim Youth Product Package

- 1 Dual Channel Unit
- 1 Case of Electrode Application Kits  
(Youth sized - 10 kits per box / 10sessions)
- 2 sets of Lead Wires with Strain-Relief Clips
- Operation Manual
- Neoprene Protective Case
- Carrying Case

## 59000 – Adult Electrode Application Kits (10 kits per box / 10 sessions)

## 59005 – Youth Electrode Application Kits (10 kits per box / 10 sessions)

## 59006 – Lead Wires with Strain-Relief Clips

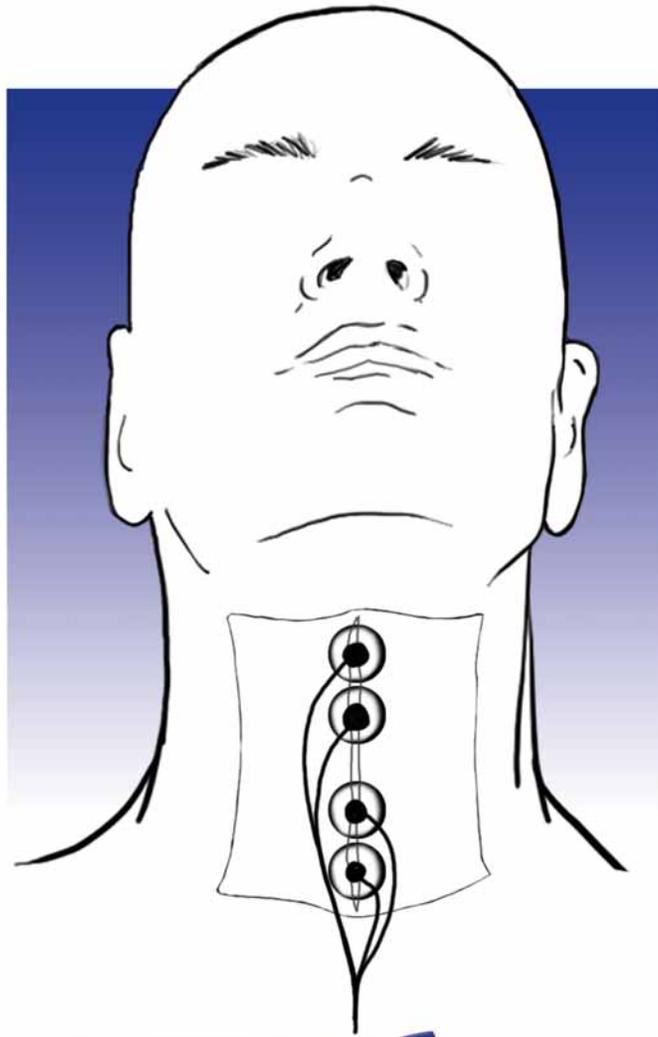
## 59010 – Neoprene Protective Case

## 59007 – Gray Carrying Case

## 59001 – Operation Manual

\*Prior to the purchase of the VitalStim Therapy device or its use, you must first be certified in VitalStim Therapy.





**VITALSTIM™**  
**THERAPY**  
BY CHATTANOOGA GROUP

# Hope for those coping with the despair of dysphagia...

What is life like with dysphagia? It is the drudgery of having all nourishment liquefied and forced into your body through a feeding tube in your stomach. It is the loss of fellowship when friends don't invite you to their homes for cookouts anymore. It is the embarrassment of needing food and having to find a place to discreetly use your feeding tube. It is the loss of the pleasure of sharing birthday cake with grandchildren, or the celebration at a wedding reception. From pediatric to geriatric, dysphagia is not limited to age. It is often associated with multiple diagnoses, conditions,

and forms of debilitating neuromuscular diseases. One of the most common conditions is stroke. Almost 75 percent of stroke survivors develop some form of dysphagia. Of those patients who undergo radiation therapy as a result of head and neck cancer, approximately three-fourths will also develop dysphagia. Studies report over half of nursing home residents have some degree of dysphagia. If this debilitating condition is not properly managed, this can lead to aspiration pneumonia, chronic malnutrition, a decrease in quality of life, and possibly death.

