

Tongue in Cheek.....So to Speak.....

(or Let's Talk About Speech Pathology)

Irene E.S. Cohen, MS,CCC-SLP

Speech Language Pathologist

Cohen Speech Pathology

OUTLINE

Speech and voice

Respiratory/breathing strengthening

Swallowing

Thinking

Speech and Voice



Speech and Voice Changes

Reduced loudness

Hoarse voice quality

Monotone

Imprecise articulation

Vocal tremor

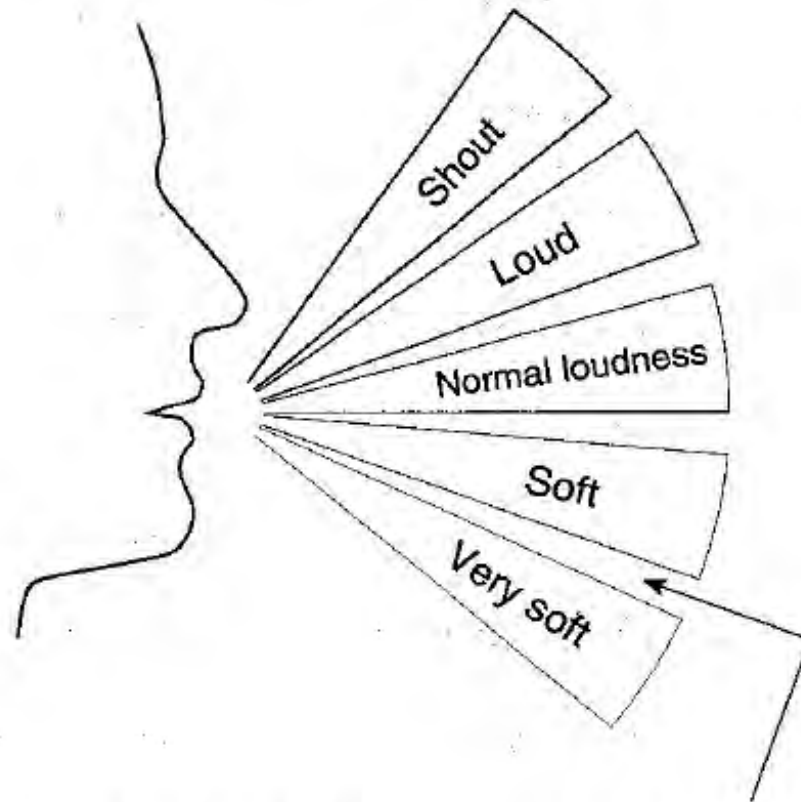
Golf.....?



LSVT LOUD TO THE RESCUE!



RELATIVE VOCAL LOUDNESS LEVEL OF AN INDIVIDUAL WITH PARKINSON DISEASE



(Adapted from Carolyn Mead Bonitati, 1987)

Vocal loudness level
of an individual with
Parkinson disease

As a result of Parkinson disease you will need to use more **vocal effort** to have a voice within normal loudness limits.

Focus of LSVT Loud

BIG—moving mouth bigger

LOUD ---talking louder than you think is necessary

LSVT Loud

Scientifically researched over the past 25 years with funding from the National Institutes of Health

Outcome data have been published in a series of articles in speech, otolaryngology and neurology journals

LSVT Loud Program

LSVT Loud treatment consists of:

- 1) 16 sessions: 4 consecutive days a week for 4 weeks
- 2) Individual 1 hour sessions
- 3) Daily homework practice
- 4) Daily carryover exercises

Benefits of LSVT Loud

- *Increased vocal loudness*
- *Improved articulation and speech intelligibility*
- *Improved intonation*
- *Improvements in facial expression*
- *Improvements in swallowing*
- *Changes in neural functioning related to voice and speech*



Pre-Treatment



SWALLOWING



How do I know if I have a swallowing problem?

- Cough before, during or after eating, drinking, or taking medications
- Sensation of food being stuck in the throat
- Avoidance of certain foods such as breads or meats
- Avoidance of drinking liquids
- Unintended weight loss

Objective Evaluation of Swallowing

- Modified Barium Swallow (MBS)
 - Speech pathologist and radiologist
 - X-ray
 - Barium is mixed with various foods and drinks
- Flexible endoscopic evaluation of swallowing (FEES)
 - Speech pathologist
 - Flexible laryngoscope
 - Direct visualization of the larynx

Objective Evaluation of Swallowing

- Why?
 - Silent aspiration
 - Recommend safe diet
 - Compensations
 - Design treatment program

Goals of Swallowing Therapy

- Maximize person's quality of life
 - Maintaining social connections especially those that involve food
 - Integrate favorite or cultural foods

Goals of Swallowing Therapy

- Reduce risks aspiration and choking
- Support optimal nutrition and hydration
- Facilitate efficiency of eating and swallowing
- Maximize person's independence with eating and drinking

RESPIRATORY TRAINING



EXPIRATORY MUSCLE STRENGTH TRAINING USING ESMT-150

- Increases strength of the muscles for exhalation
- “Weight lifting” for the muscles of exhalation
- Breathing related functions such as coughing, swallowing and speech were also improved

EMST-150 EXPIRATORY MUSCLE STRENGTH TRAINER





EXPIRATORY MUSCULAR STRENGTH TRAINING

▶ THINK 5:

- 5 REPETITIONS
- 5 TIMES PER DAY
- 5 WEEKS

PUTTING IT ALL TOGETHER

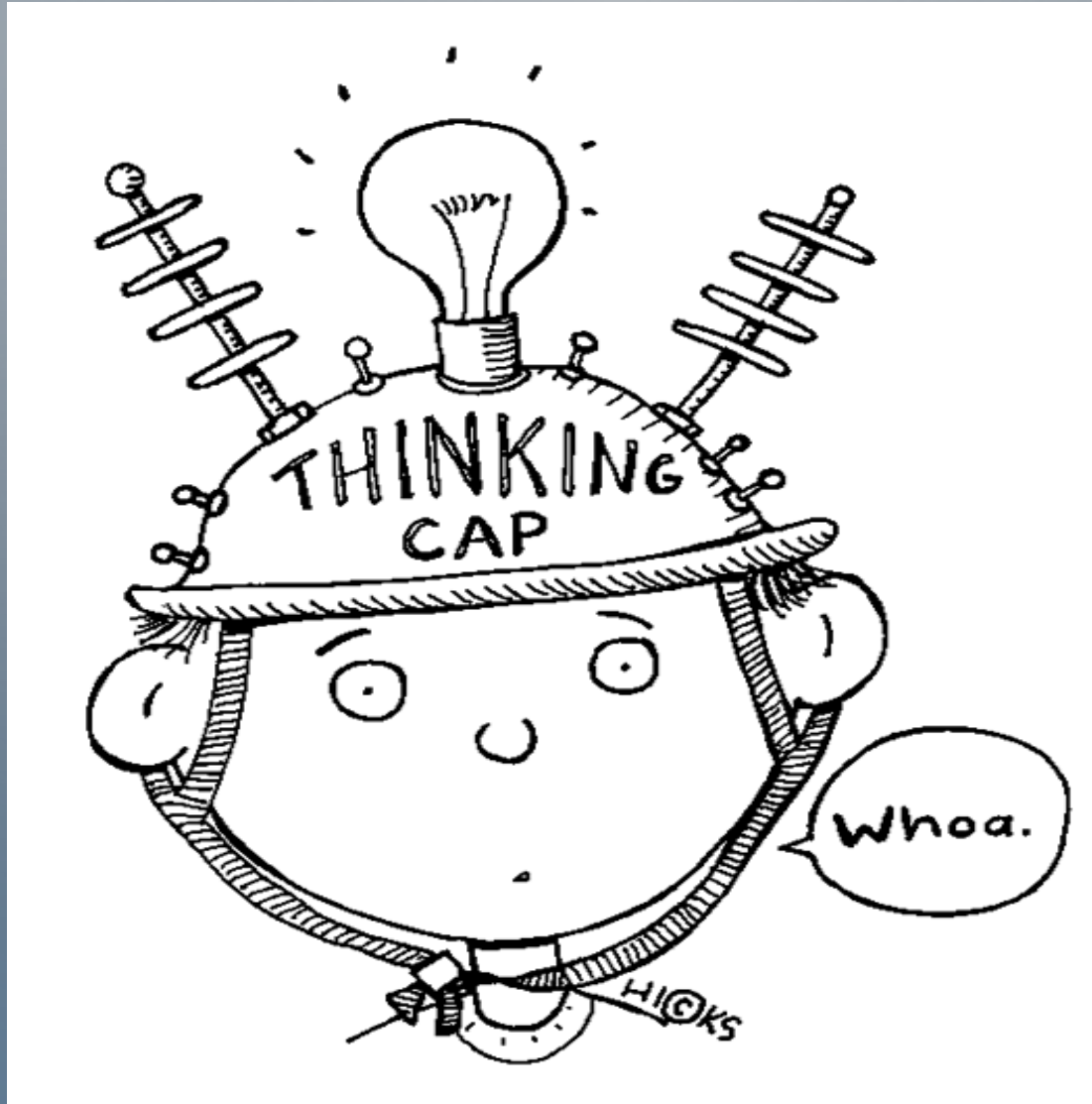
Improving the respiratory and phonatory systems can lead to

improvements in swallowing.

MIND=BLOWN



Thinking.....



Changes in Thinking and Memory

- Do not affect everyone with Parkinson's Disease
- Can occur at anytime in the course of Parkinson's Disease
- Can vary widely in trajectory and severity

Changes in Thinking and Memory

Executive Function skills are impacted

- multitasking
- planning and organizing
- problem solving

Memory

Attention

Word Finding

2-PRONGED APPROACH

Thinking Program

Compensations

Thinking Program

“Active Cognitive Lifestyle”

- Daily mentally challenging tasks
- Relevant
- Stay social

Thinking Program

Reading

- Books
- Daily newspaper
- Magazines
- Book club—join or start one

Thinking Program

Puzzles

- Puzzle books, jigsaw puzzles

Crosswords

Sudoku

Thinking Program

New skills

- Learn a language
- New craft
- Instrument

Thinking Program

Computer programs

AARP website

Proprietary “Brain Exercise” programs

- Lumosity,
- CogniFit

Thinking Program

Volunteer

- Many many opportunities
- Many non-profits need help
- Places of worship

Compensations

Goals are to *reasonably maintain*

- Independence
- Safety

Compensations

Schedules

Calendars

To Do Lists

New Routines

Use of timers, apps

Operate household appliances

TV and Cable remote

Good Fit



Teletherapy



Teletherapy

- A computer or an iPad with a webcam
- USB webcam
- Microphone
- Secure web connection (WebEx)
- No cost for the patient for the time online
- Commercial insurance
- Medicare does not pay for teletherapy

Teletherapy

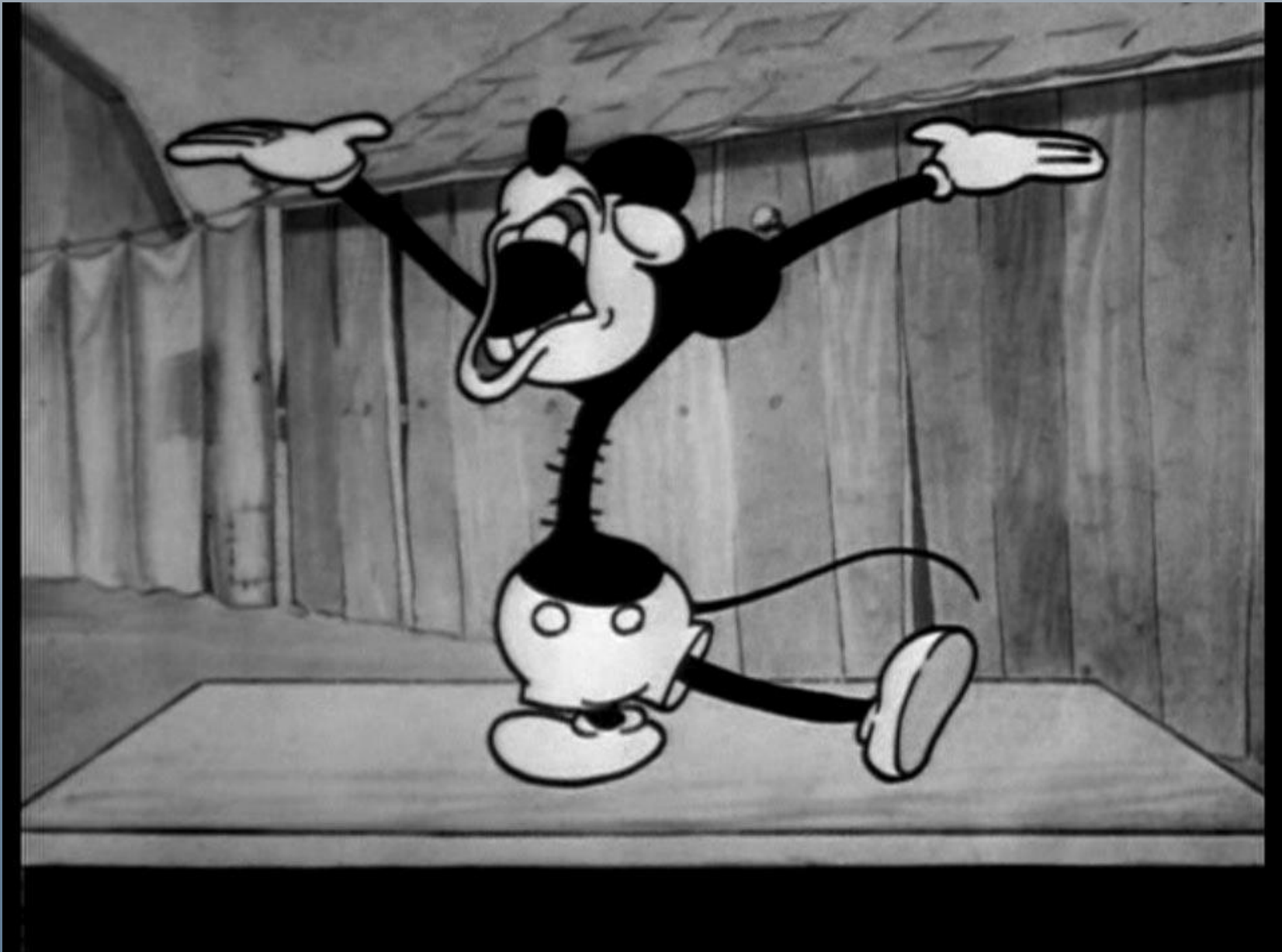


Program from Speech Pathology

- LSVT Loud
- Respiratory Training/EMST 150
- Personalized Thinking Program
- Personalized Eating Program
- Nutrition
- Daily exercise

"If all my possessions were taken
from me with one exception,
I would choose to keep the power
of communication,
for by it I would soon regain
all the rest."

Daniel Webster



HOMWORK HELPER VIDEO



LSVT[®]
LOUD

**Homework
Helper!**

Speech Exercises
for people with
Parkinson Disease
and other
neurological
disorders

LEE SILVERMAN VOICE TREATMENT LSVT LOUD

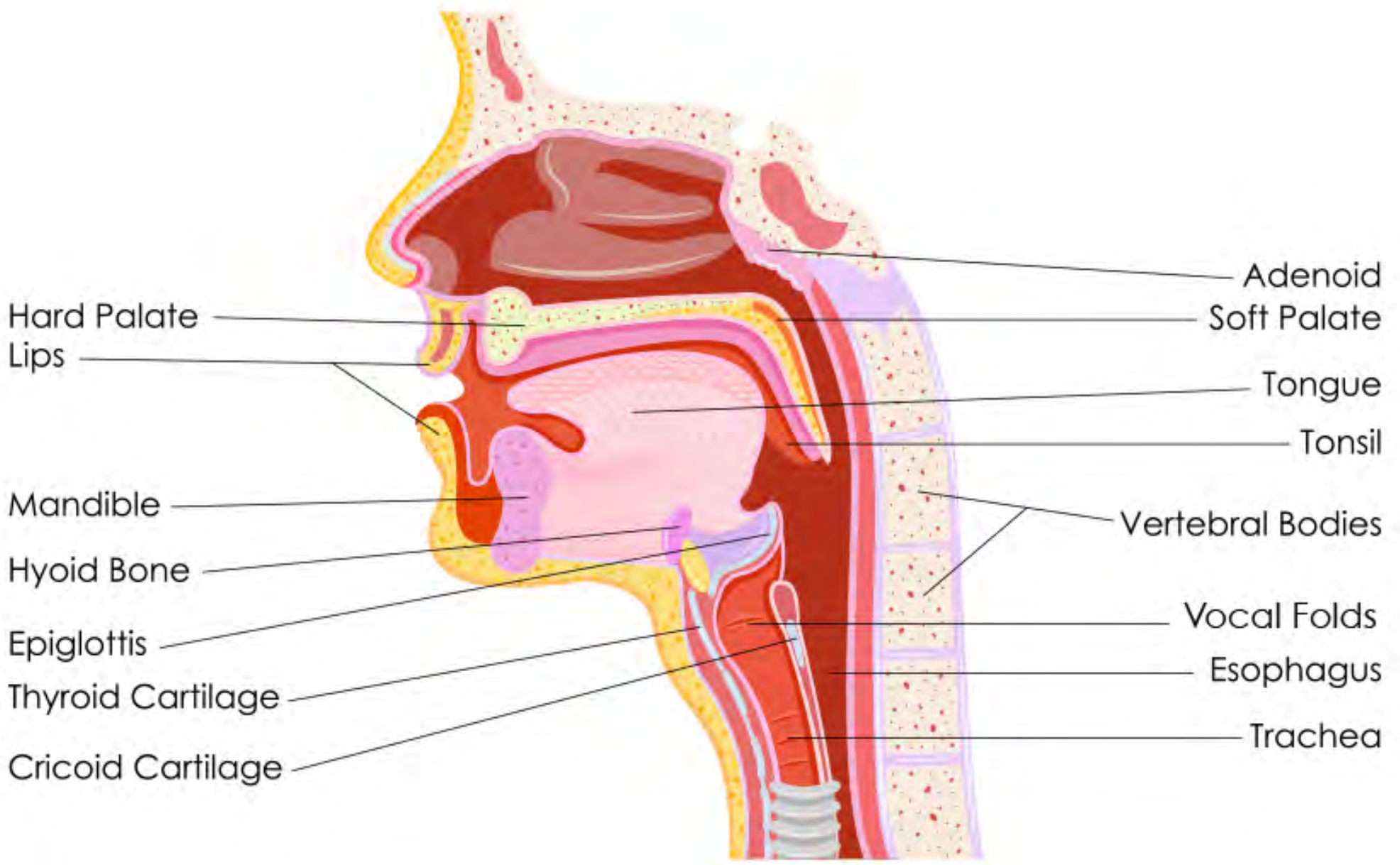
- 9200 speech pathologists in 54 countries are certified to provide lsvt loud
- Over 30,000 people with Parkinson's Disease have been treated
- Over 20 years of robust scientific research funded by the national institutes of health

LSVT LOUD IS A STANDARDIZED TREATMENT PROTOCOL THAT IS CUSTOMIZED TO THE UNIQUE COMMUNICATION GOALS OF EACH PERSON ACROSS A RANGE OF DISEASE SEVERITY AND COMMUNICATION IMPAIRMENTS.

BENEFITS OF LSVT

- Science has shown exercise can improve brain function and slow disease progression

Research on LSVT LOUD over the last 25+ years has established this spread of effects. Many different systems are activated and improvements are seen across many systems. Significant improvements have been noted in areas such as facial expression, articulation, respiratory kinematics, swallowing, neural functioning as measured by positron emission tomography (PET), and more.



Hard Palate

Lips

Mandible

Hyoid Bone

Epiglottis

Thyroid Cartilage

Cricoid Cartilage

Adenoid

Soft Palate

Tongue

Tonsil

Vertebral Bodies

Vocal Folds

Esophagus

Trachea

EMST

