

Speech Easy

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Presented by:

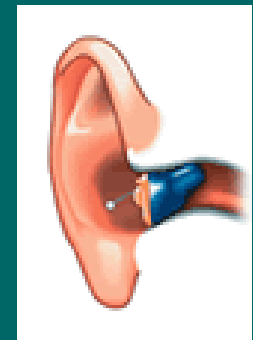
Molly Moseman & Jessica Habeck

History

- In 1992, Kalinowski, et al., began researching the effects of auditory feedback on stuttering at East Carolina University
- Research included participants in the U.S. & Europe
- Findings led to the development of the Speech Easy to decrease stuttering
- Patents for the device were received in 1999

∞ What is it? ∞

- A device worn similar to a hearing aid
- A tool to help modify/reduce stuttering behaviors
- It uses a system of Altered Auditory Feedback (AAF)
- Based on a phenomenon called the "choral effect"



How does it work?

- AAF recreates the "choral effect"
- The speaker's words are digitally replayed in their ear with delay and frequency modifications
- This tricks the brain into thinking the speaker is speaking with another person creating the "choral effect"
- Stuttering behaviors are temporarily reduced or eliminated

➤ Rationale ➤

- Research has shown that the “choral effect” occurs when persons who stutter speak in chorus and stuttering behaviors are significantly reduced or eliminated
- The Speech Easy attempts to re-create this effect in a device that can be worn and utilized in everyday situations

Technological features

- Audio delay & pitch can be changed to fit individual specifications to best suit needs
- The device can be programmed uniquely for different environments (i.e. normal vs. public speaking)
- Volume can be controlled for different situations (i.e. quiet vs. noisy)

Technological features

- Secondary noises are filtered out so only the speakers voice is recognized
- Three models are available to custom fit the device to the individuals preference
 - Behind the ear, in the canal, completely in the canal
- Device can be updated as new technology advances are discovered, rather than purchasing a new device
- One free re-shell (or device molding) is available if changes occur to the ear canal (i.e. size in children)

✧ Pricing ✧

- Prices differ based on the style of Speech Easy device selected and features desired
- Behind the ear range from \$3600-\$4100
- In the canal range from \$4000-\$4500
- Completely in the canal range from \$4400-\$4900
- One-year limited mechanical warranty available with extensions possible for additional cost

Effectiveness

- Shown to be effective in over 75% of people evaluated
- Reduction of stuttering behaviors vary by individual
- Not a cure for stuttering so follow-up therapy by an SLP is recommended
- Proven effective in a variety of situations
- Stuttering reduction varied from 50%-95%

∞ Strengths ∞

- 75% success rate among device users
- Different models available to customize device for individual preferences and needs
- Device is indiscreet when worn-not very noticeable
- Custom-molded to fit individuals specific ear canal shape

Weaknesses

- No long term research regarding the Speech Easy itself because of its novelty (some research based on effects of AAF)
- Results are varied based on individual
- Some users have experienced relapse during & after other fluency treatment
- Training to use the device may be required

∞ Process of obtaining the Speech Easy ∞

- Locate providing SLP able to dispense the device
- Obtain evaluation (takes approximately 3 hours)
- Make decision whether or not to purchase
- Receive ear impression and hearing evaluation
- Final-fitting appointment (1-2 hours)
- Decide whether to keep device within 30 days (receive a 90% refund if decide not to within that time period)

Final thoughts...

- The Speech Easy could be used as an effective TOOL to aid in therapy, but it is NOT A CURE
- Persons who stutter should be encouraged to give careful consideration before purchasing the device, looking at their individual wants & needs
- For more information, go to:

<http://www.speecheasy.com>