



BrainHQ Facts



Working Memory Stores Seven Digits

It's no accident that telephone numbers in the Canada are seven digits long. Our working memory, a very short-term form of memory which stores ideas just long enough for us to understand them, can hold on average a maximum of seven digits. This allows you to look up a phone number and remember it just long enough to dial.



Your ears collect sound but it's your brain that understands it.



WORLD ALZHEIMER'S DAY 21 SEP

World Alzheimer's Day, which takes place every September 21st, is a global effort to raise awareness and challenge the stigma around Alzheimer's disease and other dementia.

What are the risk factors?

When it comes to Alzheimer's and dementia, there are risk factors you can change and some you cannot.

Things you can change include: treating hearing loss, depression, diabetes, high blood pressure; and lifestyle changes like quitting smoking, better diet, more physical exercise, more social engagement.

Things you cannot change include your age, your gender and your genetics.

When assessing risk factors, researchers look at the number of people who develop dementia who have that risk factor, compared to those who don't. Hearing loss is one of 12 main factors that leads to the highest risk of developing dementia.

It is important to remember that risk factors on their own are not causes of a disease. **A lifelong approach to good health is the best way to lower your risk of dementia.**



Ask One of Our
Audiologists or Hearing
Instrument Specialist

Q: What treatment options are available to me when I'm ready to start treating my hearing loss?

A: Our answer is always the same: NeuroTechnology™. Advances in technology specifically designed to treat the cognitive aspects of hearing loss, not just make things louder, have significantly improved patient care and patient satisfaction.

While the most important factor in determining treatment is always based on the patient's hearing profile and health care history, specific options can be based on several factors including: addressing specific patient symptoms (difficulty in certain acoustic environments), dexterity (can the patient manipulate an invisible hearing device?), and personal preferences (color, size, etc.). Your hearing health care provider can help you understand which form of NeuroTechnology™, what shape and size, and which specific features can help you hear your best and keep you engaged in conversation.

Why Hearing Loss?

The relationship between hearing loss and cognitive decline (e.g. Alzheimer's) is complex. When hearing begins to deteriorate, it can lead to changes in how the brain processes auditory information. Problems with processing sounds in the brain like being able to filter out background noise, may be a very early symptom of Alzheimer's disease, as sound processing parts of the brain are affected by the disease.

This altered processing can put a strain on cognitive resources or 'brain power', diverting them from other tasks. Researchers have identified several ways in which hearing loss and cognitive decline intersect:

- Cognitive Load: Individuals with untreated hearing loss often need extra mental effort or 'brain power' to understand speech and conversations, especially in background noise. This increased load may leave fewer cognitive resources available for memory, problem-solving, and other cognitive functions, potentially accelerating cognitive decline.
- Social Isolation: Hearing loss can lead to social isolation as individuals find it challenging to engage in conversations and social activities. Social isolation has been linked to cognitive decline, dementia, and an increased risk of Alzheimer's disease.
- Brain Structure Changes: Studies using brain imaging techniques have shown that hearing loss is associated with

structural changes in the brain. Specifically, areas responsible for auditory processing and cognitive functions can exhibit shrinkage in individuals with hearing loss.

The amount of hearing loss and length of time someone has an untreated hearing loss impacts dementia risk. In fact, research shows that even low levels of hearing loss have been associated with increased risk, double in fact, of dementia. The risk triples for moderate levels of hearing loss and nearly five times with severe hearing loss.

Have difficulty hearing in background noise?
DO SOMETHING ABOUT IT!

CATCH EARLY, TREAT EARLY.
Call us today to schedule your comprehensive assessment.

Renee Giroux

Doctor Of Audiology, Audiologist

Completed the Certified Tinnitus Care Provider Course

Completed the Certified Dementia Practitioner Course



Brigitte Giroux

Hearing Instrument Specialist

Completed the Certified Tinnitus Care Provider Course

Completed the Certified Dementia Practitioner Course

COGNITIVE GAME OF THE MONTH

P Z Z K A D T B N L E W Y S B T B L W R E T L M
M R I B K I E N R A E H R Y L T B S O F Q T Z U
G Y P S Q X W M O A A V O M O B Z T I A P X A C
L E U T V G Z Z E I I V M P O M C T Y P U I H R
A U T O M A T I O N S N E T D O N F O R G E T I
O H T L A E H T G I T I M O D E K T R Y A H J O
Q V J Z E P V J Z S K I V M S J F M S R N R T I
V N Y O V O W X T M M J A S W P U M T K T O B H

WORD SEARCH

DEMENTIA	BLOOD
AUTOMATION	RATE
HEALTH	HEART
VISION	DOCTOR
HEAR	FITNESS
BRAIN	FORGET
MEMORY	SYMPTOMS