

# An Integrative Medicine Approach For Alzheimer Disease And Those At Risk

## Early Results Of A Novel Memory Program

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### Those at Risk: Mature Musicians Program

#### Introduction

Over the next 50 years, conservative estimates of AD are about 18 million. Although treatment is important, prevention of disease is the key. There is some evidence that novel mind stimulating activities as well as dietary factors may improve memory and cognition. We hypothesized that, in specific populations, learning to play musical instrument may improve memory and cognition.

#### Methods

Nine, elderly, independent living residents of the Alexian Village, Milwaukee WI volunteered to learn to play a musical instrument through the "Mature Musicians" program (Table I). It consisted of formal lessons, one hour, once per week at the Wisconsin Conservatory of Music, Milwaukee WI. The participants then practiced their instruments, at least 4-5 times per week at Alexian Village. Memory and cognition were tested using the Alzheimer's disease assessment scale-cognitive subscale (ADASCog), initially and after 16 and 32 weeks of practice (Fig I).

#### Results

Initially, all ADASCog scores were consistent with a very elderly population. However, after 16 and 32 weeks of practice, all had substantial improvements in ADASCog scores (Fig I). Two participants were only available for the initial testing and after 32 weeks.

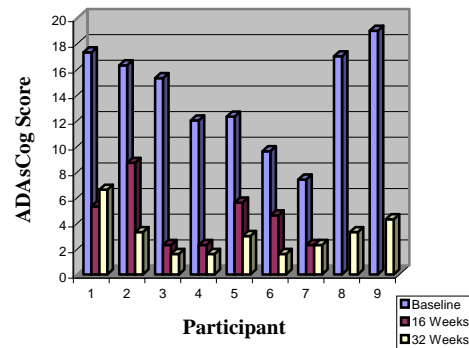
#### Conclusion

AD is a progressive neuro-degenerative disease that affects approximately 10% of all people over the age of 65 and as many as 50% of those over the age of 85. Epidemiological studies suggest that music therapy is beneficial, but learning to play music may have even greater benefits than passively listening.

**Table I Participant Demographics**

Participant	Age	Gender	Musical Instrument
1	93	F	Percussion
2	89	F	Percussion
3	82	M	Saxophone
4	80	F	Piano
5	80	F	Piano
6	77	F	Clarinet
7	81	F	Trumpet
8	76	M	Clarinet
9	74	F	Piano

**Fig. I Mature Musician Program**



### Intravenous Nutrient Therapy Improves ADASCog Scores In Mild/Moderate Dementia

#### Introduction

Epidemiological studies have suggested that a nutritionally poor diet may increase the risk of developing dementia. Oral vitamins may be a slow process complicated by vitamin bioavailability and a nutritionally poor diet. Intravenous nutrient therapy (INVT) may provide nutritional-dependent elements of AD.

#### Methods

In this pilot trial, six retirement home residents with mild/moderate AD received intravenous vitamins, biweekly for a total of eight sessions. Baseline memory and cognition testing was done prior to INVT and two weeks and three months after the final INVT.

#### Results

At baseline testing, all participants had ADASCog scores consistent with mild-moderate dementia. Participants received eight sessions over 16 weeks. ADASCog testing 2 weeks after the final INVT revealed improvement in scores in 5/6 participants (Fig II). Participant #3 was hospitalized twice (not related to this study). In long-term follow-up, three months after the final INVT, 4/6 participants continued to improve. Participant #3 was stable and participant #2 continued to decline (Fig II).

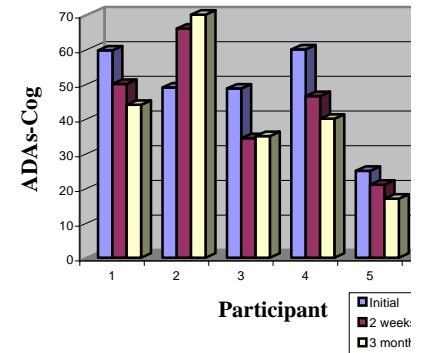
#### Conclusion

The results of this pilot clinical trial, utilizing a specific intravenous nutrient therapy (INVT), suggest that it may be possible to improve cognition and memory in mild/moderate AD. Additional studies are planned.

**Table II INVT**

Supplement	Dose
Magnesium chloride	(400mg)
Hydroxocobalamin	1000 mcg
Pyridoxine hydrochloride	100 mg
Dexpanthenol	250 mg
Riboflavin	2 mg
Naicin	100 mg
Thiamine	100 mg
Vitamin C	3 g

**Fig. II ADAS-Cog Scores and INVT**



# At Risk:

**ALEXIAN Village**

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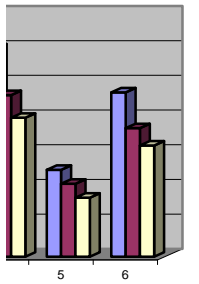
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- Initial
- 2 weeks after final INVT
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