

## CAN A MEDITERRANEAN DIET DECREASE THE ADVANCEMENT/PROGRESSION OF SYMPTOMS FOR PEOPLE WITH A DIAGNOSIS OF ALZHEIMER'S DISEASE?

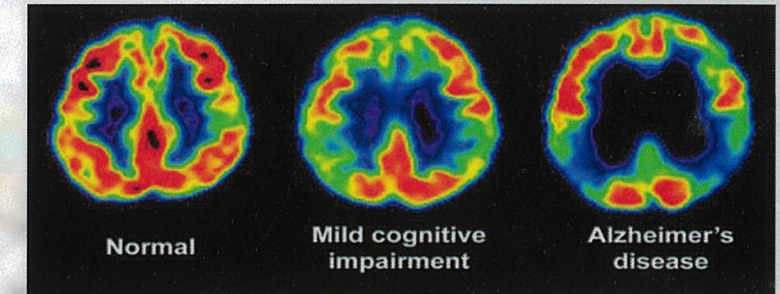


Alzheimer's Disease (AD) affects more than 26 million people worldwide. It is believed that if no actions are taken to prevent AD then the number of those affected will double in 40 years (Otaegui-Arrazola, Amiano, Elbusto, Urdaneta, & Martinez-Lage, 2013). In 2011 there were 48,182 New Zealanders with dementia, and it is estimated that by 2050 147,359 New Zealanders will have dementia, 2.6% of our population (Dementia Economic Impact Report, 2012). What could we do prevent this? The answer could be the Mediterranean Diet.

There is a clear association found in 5 out of 6 studies between AD and a Mediterranean diet (MeDi), those on a MeDi have a decreased risk of AD along with this MeDi has been proved to improve cognitive function (Otaegui-Arrazola et al., 2013). Those who had mild cognitive impairment and the risk of it converting into AD was lower in participants who were adherent to the MeDi. This was found in two of three studies (Otaegui-Arrazola et al., 2013).

### IMPLICATIONS OF PRACTICE

- MeDi consists of a high intake of vegetables, fruits, nuts, olive oil, saturated lipids, fish, dairy products, meat/poultry, and wine (Otaegui-Arrazola et al., 2013). MeDi consists of food there is an obvious implication of allergies, thus being difficult to bid by for it to be effective.
- The cost of the MeDi is an implication because not everyone can afford the diet. People over 65 years are often retired and on the pension, therefore are unlikely to have enough money for the MeDi. It was found that the most healthy dietary patterns were those who were associated with a higher socioeconomic position (Mullie, Clarys, Hulens, & Vansant, 2010).
- Due to the link between MeDi and AD lacking conclusive research nurses cannot use the information gathered due to the inconsistencies even though there is an association between the two. This is because nurses use evidence based practice and research is lacking conclusive/consistent studies.
- The last implication of the MeDi for nursing practice is that wine is part of the diet. Alcohol can interact with patient's medication and often alcohol is not recommended whilst on medication or reducing alcohol intake is recommended.



### NURSING RECCOMENDATIONS

1. Those who are at a higher risk of AD should be encouraged to try the MeDi. Studies suggest that the MeDi would be best as an early intervention strategy (Otaegui-Arrazola et al., 2013). Primary health practices should have sufficient knowledge about the diet and if a patient is at a higher risk they should inform the patient about the diet. The benefit of this to prevent diseases (eg: AD) for their patients.
2. Once a person has mild cognitive impairment (MCI) or AD the person and family members should be informed about the MeDi. Data suggests that MeDi protects against MCI and that people who have MCI should try the MeDi as an ideal treatment that could improve their cognitive function and prevent MCI progressing (Etgen, Sander, Bickel & Forstl, 2011). The benefit would be that the diet, used as an alternative method could improve cognitive function and slow the AD advancement.
3. NZ studies should be performed because there have been some inconclusive studies. Dementia costs NZ approximately \$954.8million a year, and to put money into preventing a disease which is costing our country so much a year would be incredibly beneficial in the long term (Dementia Economic Impact Report, 2012).
4. Dietitians should go to rest homes and talk to the staff about trying the MeDi. Residents in their rest home would benefit drastically by preventing cognitive decline. The Ministry of Health and DHB should be talked to about MeDi also because they are responsible the facilities and that they meet the nutritional needs (Chisolm, Jensen, & Field, 2011). This could benefit all residents and their family and friends from advancement AD or MCI.

#### References:

- Chisholm, A., Jensen, J., & Field, P. (2011). *Eating environment in the aged-care residential setting in New Zealand: Promoters and barriers to achieving optimum nutrition. Observation of the foodservice, menu and meals.* Nutrition & dietetics, 161-166. doi: 10.1111/j.17470080.2011.01510.x
- Dementia economic impact report 2011. (2012). Reports and statistics. Retrieved from: <http://www.alzheimers.org.nz/information/reports-statistics>
- Etgen, T., Sander, D., Bickel, H., & Forstl, H. (2011). *Mild cognitive impairment and dementia.* Deutsches Aerzteblatt International, 743-749.
- Feart, C., Samieri, C., Alles, B., & Barberger-Gateau, P. (2012). *Potential benefits of adherence to the Mediterranean diet on cognitive health.* Proceedings of the Nutrition Society, 140-152.
- Mullie, P., Clarys, P., Hulens, M., Vansant, G. (2010). *Dietary patterns and socioeconomic position.* European Journal of Clinical Nutrition, 231-238. doi: 10.1038/ejcn.2009.145
- Otaegui-Arrazola, A., Amiano, P., Elbusto, A., Urdaneta, E., & Martinez-Lage, P. (2013). *Diet, cognition and Alzhemier's disease: food for thought.* European Journal of Nutrition, 1-24. doi: 10.1007/s00394-013-0561-3
- Risk Factors. (2014). Retrieved from: [http://www.alz.org/alzheimers\\_disease/causes\\_risk\\_factors.asp](http://www.alz.org/alzheimers_disease/causes_risk_factors.asp)



P – Population:	Those with Alzheimer's disease	People who get Alzheimer's vary in age, sex, and ethnicity and anyone in adult to elderly can get this disease, therefore my population will be those diagnosed with Alzheimer's.
E – Exposure:	Those with Alzheimer's who are trying a Mediterranean diet	I will be looking at articles of how a Mediterranean diet could play a factor and could be used as an alternative for reducing the effects of Alzheimer's development.
C – Comparison:	Mediterranean diet compared to not trying this diet	I am interested to see if studies show that a Mediterranean diet can decrease the advancement of Alzheimer's compared to those who are not on this diet.
O – Outcome:	Decrease the advancement/progression of Alzheimer's	I want to know if the outcome of being on a Mediterranean diet can reduce the advancement of Alzheimer's disease.
T – Time:	N/A	Alzheimer's is a varying disease and cannot be cured therefore it is an ongoing disease from diagnosis until death. Time of advancement is difficult to measure over time.

(Whitehead, 2013).

**Research question: Can a Mediterranean diet decrease the advancement/progression of symptoms for people with a diagnosis of Alzheimer's disease?**

### Rationale:

The reason I chose the poster option for this part of the assignment was because I believe more people would benefit from it. This is because more people have the chance of seeing the poster. By seeing the poster they would be able to internally think about not only the Mediterranean diet but other alternative methods to decrease the advancement of Alzheimer's disease. I believe that the literature in which I reviewed showed there was a clear association between Alzheimer's disease and the Mediterranean diet. If more people were to see the poster and question this association between the two, more studies could be constructed meaning more conclusive studies. If more conclusive studies were done the Mediterranean diet could be a massively effective part of decreasing the advancement of Alzheimer's disease. Along with this I believe I could get my point across about the association of Alzheimer's disease and the Mediterranean diet in more of an effective manner with the poster by using pictures and visual features.