Extended Abstract

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Introduction:

Recently, increased interest has been prsented in developing diverse strategies to optimize cognitive aging and to modify the onset and course of alzheimer dementia “ad”. The interaction of Gene and Environment in modulating cognitive decline is best understood within the framework of Epigenetics. Epigenetics refers to heritable changes in gene expression and remodeling of chromatins and dependent of alterations in dna sequence, and comprise of three key components; dna methylation, histone modifications (acetylation and deacetylation) and non-coding microRNA. Epigenetics targets play major role in reprogramming of neural networks and neural repair. Epigenetics can turn genes on and off depending upon the milieu. There is emerging evidence supports the model of dysregulation in epigenomics in age-related cognitive decline and “ad”. A large number of studies have shown that nutrition factors: diets, dietary and herbal supplements, functional foods, are capable of regulating the epigenetic states and targets in reversing abnormal gene activation or silencing.

Objectives:

At conclusion of this session, the participant should be able to recognise how cognition can be implemented by dietary interventions targeting EPIGENOMICS in aging & alzheimer dementia “ad”. To evaluate the benefit-to-risk ratio and evidence of clinical cognitive studies of specialized diets, dietary supplements and functional foods in preventing cognitive decline in aging and in “ad”.. To get insights into the benefits of aerobic exercise and edelivered video games in reprogramming gene expression and neural circuits involved in cognitive aging and in developing the course of “ad”. To identify fiscal and systemic issues involved in translating new research findings on brain foods, exercise and e-delivered brain exercise to evidence-based practice in geriatric are to understand how EPIGENOMICS may brighten on the link of nutrition, cognition and “ad”. and has the potential to transform bioactive PHYTOCHEMICALS to promising drugs for treating and preventing “ad”.

Result

Physical Exercises and Edelivered Brain Games likewise can change various domains in aging and in “ad” through the epigenetics signature. We checked the translational and clinical evidence in support of the positive effects of dietary phytochemicals from alternate dietary sources; grapes, chocolates, green and black coffee, soya beans and fava beans, curry extract, peanuts, garlic and ginger, spices and seafood products have good impact on EPIGENOMICS in facilitating translational and transcriptional events involved in memory, attention and executive functions.

Conclusion

The research from the studies on Dash and Mediterranean diets reinforce the relevance of epigenetic diet menu, along with the proposed Epigenetics diet for cognitive aging platform. We Will Also determine the multi faceted results of Herbal Supplements:- Panax Ginseng , and Curcumin From Curry Extract, And Zembrin Extract From south african plant Sceletiumtortuosum. And diet menu in increasing VASCULAR neuronal coupling and to reduce metabolic and vascular risks in aging. Epigenetics targets are also sensitive to environmental stimuli and processing. Hence PHYSICAL EXERCISES and EDELIVERED cognitive challenge tasks like puzzles, video games. The evidence is mounting in terms of the putative positive effects in reprogramming neural circuitry for cognition and reactivating NEUROGENESIS in the hippocampus.

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