## DEBATE: CAN LIFESTYLE CHOICES PREDICT OUTCOME IN DEMENTIA? NO

Panteleimon Giannakopoulos, Switzerland

In the absence of effective pharmacological treatment of dementia, there has been intensive epidemiological work to identify modifiable lifestyle factors that may increase or decrease the risk for these disorders. Several randomized controlled trials assessed the effects of physical, cognitive and nutritional interventions on the incidence of dementia in old age. Although vascular risk factors such as hypertension, hypercholesterolemia and physical inactivity were all associated with dementia, cardiovascular fitness is not essential for cognitive benefits. Strength training seems to be more efficient than aerobic fitness in cases with mild cognitive impairment but here again the cognitive benefits are rather modest and mainly confined to executive functions without main effects on delayed recall. Cognitive intervention trials were also disappointing. The rare placebo controlled studies led to negative data and the rare positive results are limited by the difficulties of transfer of effects to daily living. Future strategies including the use of virtual reality for both physical and cognitive training in prodromal cases may be promising but are still not validated. Nutritional trials with antioxidant agents, folic acid, vitamin B12 and polyunsaturated fatty acids showed that their administration on top of a healthy diet is not only unfruitful but also even, in the case of vitamin E, harmful. Taken together, the accumulation of negative or slightly positive data in last years dampened the enthusiasm for lifestyle interventions in dementia. It is likely that such interventions could have some interest when correcting a negative lifestyle but not on top of a healthy one.