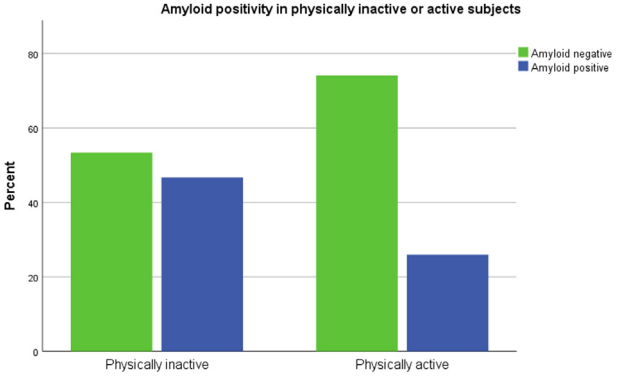
mellitus, physical activity, depression and anxiety. Core AD biomarkers (Aβ42, t-tau and p-tau) were measured in cerebrospinal fluid (CSF) using Elecsys and subjects were categorized according to whether or not they were amyloid (A) positive (CSF Aβ42 $<$ 1098 pg/mL), tau (T) positive (p-tau $>$ 19.2 pg/mL) and neurodegeneration (N) positive (t-tau $>$ 242 pg/mL). We used logistic regression analyses to test whether the risk factors predict CSF biomarker positivity, adjusted by the effect of age, gender, years of education and *APOE-ε4* status. **Results:** We studied 257 participants, with a mean age of 60.7 years, 64.5% were female, 40.1% *APOE-ε4*carriers and 29.6% were A+, 26.1% T+ and 23.3% N+. Physical activity was associated with reduced risk of amyloidosis; 46.7% of physically inactive individuals were A+ vs 25.9% of physically active subjects ($P = 0.014$). No significant associations were found regarding the other risk factors. **Conclusions:** The findings of this exploratory study suggest that physical activity is associated with lower amyloid burden. Future studies in larger, longitudinal and independent populations are needed to further confirm these results.

Table 1. Logistic regression models with biomarker positivity (A, T or N) as outcome and each risk factors as a predictor.

	Amyloid positivity (A+)		Tau pathology positivity (T+)		Neurodegeneration positivity (N+)	
	B (SE)	P-value	B (SE)	P-value	B (SE)	P-value
Systolic pressure	-0,006 (0,011)	0,553	-0,010 (0,011)	0,355	-0,004 (0,011)	0,700
Diastolic pressure	0,002 (0,017)	0,898	-0,010 (0,016)	0,527	-0,011 (0,017)	0,529
Dyslipidaemia	0,167 (0,315)	0,596	-0,050 (0,308)	0,871	-0,018 (0,318)	0,954
BMI	-0,001 (0,037)	0,988	-0,038 (0,038)	0,316	-0,042 (0,039)	0,278
Diabetes	0,396 (0,832)	0,634	-0,424 (0,925)	0,647	-0,368 (0,923)	0,690
Physical activity (Active or inactive)	-0,924 (0,377)	0,014*	-0,806 (0,382)	0,423	-0,614 (0,383)	0,109
Physical activity (MET-min/week)	0,000 (0,000)	0,074	0,000 (0,000)	0,356	0,000 (0,000)	0,989
Depression non major	0,758 (0,438)	0,084	0,057 (0,462)	0,901	0,199 (0,464)	0,669
Depression major	-0,341 (0,636)	0,591	-0,051 (0,582)	0,930	-0,018 (0,582)	0,976
Anxiety non generalized	-0,231 (2,066)	0,661	0,613 (0,492)	0,213	0,613 (0,492)	0,213

All analyses were adjusted by age, gender, years of education and APOE ε4 status. Dyslipidaemia, diabetes, physical activity (active or inactive), depression and anxiety are treated as dichotomic variables taking as reference value the absence of the factor.
**Statistically significant (p<0.05)*
Abbreviations: B: beta regression coefficient; BMI: body mass index; MET: metabolic equivalents; SE: standard error.



P1-013 PHYSICAL ACTIVITY IN YOUNG AND MIDDLE ADULTHOOD ARE INDEPENDENTLY LINKED TO LATER-LIFE MEMORY FUNCTIONING

A. Zarina Kraal and Laura B. Zahodne, *University of Michigan, Ann Arbor, MI, USA. Contact e-mail: azkraal@med.umich.edu*

Background: Physical inactivity measured during late-life is a modifiable risk factor for dementia, but many studies use concurrent assessments with limited longitudinal follow-up. Less is known regarding life course exposure to physical inactivity. Physical activity patterns at different ages may make independent contributions to dementia risk, which would point to multiple critical periods for intervention. The current study tested whether retrospective reports of physical activity at age 18-29 and age 40-49 were independently associated with longitudinal memory trajectories later in life. In addition, we tested whether associations were mediated by late-life cardiometabolic diseases. **Methods:** Using data from 4,899 respondents to the Health and Retirement Study's 2015 or 2017 Life History Mail Survey, latent growth curve models estimated independent associations between retrospective reports of physical activity at ages 18-29 and 40-49 and episodic memory trajectories over 18 years. Total metabolic equivalents were computed from reports of moderate and vigorous physical activity. Biennial performance on a memory task was modeled from study entry (between 1996 and 2014) to 2014. Cardiometabolic diseases (i.e. high blood pressure, diabetes, and heart disease) self-reported at study entry were modeled as independent mediators. Models were adjusted for baseline age, sex, education, race, ethnicity, childhood socio-economic status, year of study entry, and year of mail survey enrollment. **Results:** More physical activity at ages 18-29 and 40-49 were independently associated with better memory at study entry (mean age = 60.42), but not with subsequent memory change. For physical activity at ages 40-49, this association was partially mediated by lower prevalence of high blood pressure. **Conclusions:** Physical activity during both young and middle adulthood may be independently beneficial for later-life memory. The salutary effects of physical activity in middle adulthood appear to be partially conferred by better blood pressure regulation. Future studies should use more comprehensive assessments of cardiometabolic health to further characterize mechanisms underlying the potentially protective effects of physical activity during different points of the life course on cognitive health in older adulthood.

P1-014 CEREBROVASCULAR, COGNITIVE AND GLYCAEMIC BENEFITS OF LONG-TERM RESVERATROL SUPPLEMENTATION IN POSTMENOPAUSAL WOMEN

Jay Jay Thaung Zaw[1], Peter RC. Howe[1,2], Hamish M. Evans[1], Rachel HX. Wong[1,2], [1]*University of Newcastle, Callaghan, New South Wales, Australia;* [2]*University of Southern Queensland, Toowoomba, Queensland, Australia. Contact e-mail: jayjay@uon.edu.au*

Background: Due to declining estrogen levels, the impact of vascular ageing that contributes to poor cerebral perfusion affects postmenopausal women adversely. Our 14-week pilot study showed that resveratrol supplementation, a phytoestrogen found in skins of grapes and berries, improved cognition and cerebrovascular function in postmenopausal women, offering a potential novel approach to assist with healthy ageing. In the first ever long-term study with resveratrol, we aim to confirm its benefits on cognition and cerebrovascular function. **Methods:** One hundred and forty one normotensive postmenopausal women (mean age= 64±1 years) who were not on hormone replacement therapy, were randomised to take 75mg resveratrol or placebo twice daily for 12 months. Parameters of systemic vascular function including blood pressure, compliance of large and small arteries and cardio-metabolic biomarkers (i.e. fasting glucose, insulin and lipids) were examined.