Supplementary Material

A Mediterranean Diet and Walking Intervention to Reduce Cognitive Decline and Dementia Risk in Independently Living Older Australians: The MedWalk Randomized Controlled Trial Experimental Protocol, Including COVID-19 Related Modifications and Baseline Characteristics

ORIGINAL POWER CALCULATION (original design pre-impact of COVID-19)

In this cluster-randomized controlled trial, we need to determine the number of IL facilities (i.e., clusters) to be included in the study and the number of people to recruit at each. The latter is determined on practical grounds with 13 people regarded as a feasible average number of participants to recruit at each facility. Based on the LIILAC results a moderate effect size is indicated (d=0.5, F Hedges=0.25) using the SUCCAB SWM performance measure. A similar effect size is expected for errors on the CANTAB-PAL, when comparing the intervention and control group over time, with 3.6% of the variation attributable to differences between facilities. In this power analysis, a repeated measures MANOVA analysis allowed for multiple outcome measures with 5 assessments for all participants. In addition, an adjustment was made for the cluster sampling, taking into account the average number of people recruited at each facility and the percentage of between cluster (facility) variation. Assuming a significance level of 5%, power of 80% and an attrition rate of 30% (expect <30% based on LIILAC, MedLey, and proposed MI-CBT approach) it was determined that the sample size would equal 364 participants. With feasible recruitment targeted at 13 participants per facility, we would need 28 facilities to achieve the sample size of 364 participants.

Supplementary Table 1. Dietary Recommendations for the Intervention Group

Food	Servings	General guidelines	
Extra virgin olive oil	≥3 Tbsp per day	Use liberally, in savory and sweet cooking and as a dressing/sauce.	
Vegetables	≥ 5 serves per day	Emphasize tomatoes, onions, garlic, leafy greens, and seasonal produce.	
Fruit	≥2 serves per day	Choose fresh fruit, choose seasonally. Avoid canned fruit in syrup.	
Grains and cereals	3-6 serves per day	Choose mostly whole grains including wholemeal breads, rye and sourdough, wholemeal pasta, couscous, brown rice.	
Greek yoghurt and low-fat cheese	1 serve of each per day	Choose feta and ricotta cheese. Avoid sweetened yoghurt. Choose a mix of low fat or regular fat dairy food.	
Red and processed meat	≤1 serve per week of each	Select white meat over red meat and avoid processed meat (salami, sausages, hamburgers).	
Sofrito sauce	≥2 serves per week	Cook pasta, rice, and vegetable dishes in sofrito sauce. Use it as a base for soups and casseroles.	
Fish	≥3 per week	Include oily fish like sardines, tuna, or salmon, fresh or canned is suitable. Avoid battered or deep fried from takeaway shops.	
Legumes	≥3 per week	Lentils, chickpeas, and beans, canned, dried or fresh.	
Nuts	≥5 per week	Choose unsalted, uncoated nuts or nut flours or 100% nut butters. Eat as a snack and add to salads and pasta dishes.	
Standard Alcoholic drink	≤2 per day	Usual drinkers, choose mostly red wine. If a non-drinker, not a requirement to commence consumption.	
Discretionary foods	≤3 per week	Drastically limit butter, margarine, cream, ice-cream, soft-drinks, fruit drinks, energy drinks, sweets, chocolate, biscuits, take-away, deep fried foods and desserts.	
Eggs	Ad libitum	Eat at participants discretion. Heart Foundation (Australia) guideline is no limit, unless individuals have type 2 diabetes or undertaking LDL-C lowering interventions; then <7 eggs per week.	

Supplementary Table 2. Group Walking Schedule for the Intervention Group

Week	Type of Visit	Time (indicative)
Week 0	Baseline timepoint - Group session,	20 Minutes
	PA instruction presentation	
Week 1	Group walking session	20 Minutes
Week 2	Group walking session	25 Minutes
Week 3	Group walking session	25 Minutes
Week 4	Group walking session	30 Minutes
Week 5	Group walking session	35 Minutes
Weeks 6-25	Group walking session - weekly	35–50 Minutes
Weeks 26-52	Group walking session - monthly	35–50 Minutes