Supplementary Material 2. MediCul elements, cut points, scoring and rationale

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
1. Olive oil	Q25 Fat types frequency	Days/wk	0 = No added fats used 0 = Total other fats > olive oil 3 = Total other fats = olive oil 6 = Total other fats < olive oil	6	Olive oil was the primary culinary fat used in the traditional Med diet[1]. The relative frequency of exposure to various fat types is easier to rate than quantifying amounts. This also avoids scoring for MediCul using the leading MEDAS Q[2]
	Q26 Butter/cream intake	Serves/d	N/R Q included for MEDAS score only	N/R	As below for Q27[3].
	Q27 Margarine intake	Serves/d	N/R Q included for MEDAS score only	N/R	Not scored in MediCul as difficult to accurately quantitate serves. For purposes of MEDAS scoring, MediCul defines 1 serve=1 tsp (5g), and makes an adjustment (as MEDAS 1 serve=12g), as this amount is easier to visualise and more consistent with typical food portions consumed by Australian adults (5-7g margarine for 31-71+ years)[3].
	Q28 Olive oil quantity	TBSP/d (1 Australian TBSP = 15 g or 20 ml)	0 = 0-1.99 TBSP/d 3 = 2-3.99 TBSP/d 6 = ≥4 TBSP/d	6	High olive oil intake (i.e. 60g/d) is consistent with traditional Cretan use (e.g., 95g/d edible fats in 1960s; mostly olive oil)[4] and meets or exceeds MEDAS cut point ≥4 TBSP/d[4].

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					Note MEDAS 1 TBSP=13.5 g, hence 53 g/d required.
	Q29a Olive oil as main culinary fat	Subjective response as to whether olive oil is main fat in diet: no or yes	N/R Q included for MEDAS score only	N/R	Not scored in MediCul as leading Q. Original MEDAS Q[2], slightly improved for inclusion within MediCul by prompting to consider use of all fats/oils, including spreads. Also, this Q follows others on various fat serves consumed, to help participant identify more correctly whether olive oil *is* the main culinary fat.
	Q29b Olive oil type	N/R	0 = lite, classic, other 4 = extra virgin	4	Traditionally, olive oil was all extra virgin, which contains polyphenols. Research shows polyphenols are key to the efficacy of olive oil[5,6]. Many olive oils are refined and do not contain significant polyphenols[7] so it is important to know which type is used. No other Med diet tools assess this, likely because in the past the role of the minor constituents of olive oil was underappreciated.
2. Vegetables	Q1 Vegetable intake	Serves/d	0 = 0-2.99 serves/d 1 = 3-4.99 serves/d 2 = ≥5 serves/d	2	Based on validated Q in Australia for national monitoring. Measures all vegetables/salads including potato, which was included in original Med diet index tool as traditionally consumed cooked as a vegetable (not fast food)[8]. Consistent with AGTHE serves[9]. AGTHE 1 serve = ½ cup (75g), hence ≥5 serves/d = 375 g. MEDAS cut point ≥2 serves/d (where 1 serve = 200 g, hence ≥400 g/d).

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					AGTHE recommends 375 g/d, which approximates 400 g/d cut point in MEDAS[2,9].
	Q2 Vegetable variety	Types/wk	0 = <10 types/wk 1 = ≥10 types/wk	1	Dietary guidelines promote increased dietary variety. Increased vegetable variety is associated with higher diet quality[10]. Vegetable variety is also associated more strongly with reduced cancer risk than vegetable quantity[11]. Simply assessing vegetable quantity may therefore not fully capture the mechanisms whereby vegetables decrease disease risk. Keim *et al.* [10] used cut point ≥10 different vegetables/wk for high variety. CSIRO Healthy Diet Score includes multiple Qs on vegetable variety[12]. No other Med diet tools assess this.
	Q3 Vegetable raw frequency	Times/wk	0 = 0-3.99 times/wk 1 = ≥4 times/wk	1	Traditional Med diet regularly included raw vegetables in the form of salads e.g. cabbage salad, village salad (mixed), dakos (grated tomato on rusks with EVOO). Hence frequency of raw vegetable exposure over most days per week is assessed. Research suggests raw vs. cooked vegetables are associated with better mental health and reduced mortality[13,14]. Ciccarone *et al.* [15] in their Med tool used cut point for exposure to raw vegetables of ≥3 times/wk. CSIRO Healthy Diet Score assesses salad vegetables[12].
	Higher lutein vegetable	Times/wk	0 = 0-1.99 times/wk	2	Dark green leafy vegetables were consumed in the traditional Med diet, mostly picked wild from the

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
	frequency: Q4a Other green vegetables Q4b Dark green leafy vegetables		1 = 2-3.99 times/wk 2 = ≥4 times/wk		mountains[16,17]. These are rich in lutein, nitrate and vitamin K, which provide vascular and cognitive benefits[18-20]. Higher plasma lutein levels and green leafy vegetable intake is associated with decreased dementia risk, slowing of cognitive decline and age-related macular degeneration[21-23]. Two questions are asked about different types of green vegetables to minimise response bias. Cut point relates to frequency of exposure for most days per week, which is simpler to estimate than quantity consumed. MIND study[21] cut point is ≥ 6 serves/wk. No other Med diet tools assess this except Italian Mediterranean Index (IMI)[24].
	Q5 Onions/garlic frequency	Times/wk	0 = 0-3.99 times/wk 1 = ≥4 times/wk	1	The allium family of vegetables is regularly consumed (mostly daily) in the traditional Med diet in salads and cooked dishes and contributes to polyphenol intake[25]. Cut point relates to frequency of exposure for most days per week, which is simpler to estimate than quantity consumed. No other Med diet tools assess this except Italian Mediterranean Index (IMI)[24].
	Q8 Grow own vegetables	N/R	0 = No 1 = Yes	1	Having a home garden was traditional and is positively correlated with a high Med diet score in the Australian arm of the MEDIS Study[26]. Growing any vegetables may promote an increased intake, physical activity and higher vitamin D levels[27]. No other Med diet tools assess this.

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3. Fruit	Q12 Fruit intake	Serves/d	0 = 0-0.99 serves/d 3 = 1-2.99 serves/d 6 = ≥3 serves/d	6	Q based on standard Q from national surveys in Australia. Examples of dried fruit also provided since consumed in the Mediterranean[4]. Cut point is consistent with MEDAS[2] ≥ 3/d (but MEDAS also counts fruit juice), Greek dietary guidelines[28] and high traditional (1960s) Cretan intake of 464 g/d[4]. Higher fruit intake is associated with reduced stroke risk[29-31]. MediCul cut point exceeds 2 serves/d recommended by AGTHE[9]. MediCul excludes juice as this increases the glycaemic load, thereby providing different effects to whole fruit. Also, juice was not regularly consumed in the traditional Med diet.
4. Nuts	Q24 Nuts intake	Serves/wk (1 serve = 30g or 1.5 TBSP nut/seed butter)	0 = 0-0.99 serves/wk 2 = 1-2.99 serves/wk 4 = 3-4.99 serves/wk 6 = ≥5 serves/wk	6	Nuts were regularly consumed in the traditional diet[16]. Observational studies show greater CVD protection with exposure to nuts ≥5 times/wk[32,33]. Clinical and observational studies show improved cognition or reduced cognitive decline with age with nut consumption[34-36]. MediCul uses wider range of cut points then MEDAS for increased discernment. MEDAS[2] cut point ≥3 serves/wk. Goulet *et al.* [37] cut point >2 portions/d is for legumes and nuts/seeds combined.

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
5. Wholegrains	Q20 Wholegrain/lower GI bread frequency	Frequency	0 = No bread used 0 = White > (wholegrain + wholemeal + rye + sourdough) 3 = White = (wholegrain + wholemeal + rye + sourdough) 6 = White < (wholegrain + wholemeal + rye + sourdough)	6	Grain foods were an important part of the traditional Med diet and mostly unrefined (intact, cracked or coarsely milled)[38]. Bread was made using a sourdough culture[39]. Such forms result in a lower GI, which is associated with health benefits [40-42]. This Q uses bread as a proxy for quality of grains most frequently consumed. MIND diet[21] uses cut point ≥3 serves/d but serves for different grain foods vary and are difficult to estimate, hence not used in MediCul. MEDLIFE criteria[43] for wholegrains = fibre >25 g/d, which requires nutritional calculations.
6. Legumes	Q19 Legume intake	Serves/wk (1 serve = 1 cup cooked dry beans or 150g)	0 = 0-0.99 serves/wk 3 = 1-2.99 serves/wk 6 = ≥3 serves/wk	6	Legumes were a core food in traditional peasant Med diets in the 19th century, used as a meat replacement[28,44]. MediCul cut point is consistent with MEDAS[2] ≥ 3 serves/wk and serve size. The AGTHE protein serve (1 cup cooked), rather than vegetable serve (1/2 cup cooked), is used as more consistent with traditional food use[9]. GLNC recommends legumes are consumed 2-3 times/wk[45].
7. Fish/shellfish	Q16 Fish/shellfish intake	Serves/wk (1 serve= 1 small fish fillet or 1 small can	0 = 0-0.99 serves/wk 3 = 1-2.99 serves/wk	6	Fish was part of the traditional Med diet but intake depended on proximity to the sea[1]. Research shows fish may contribute to brain structure benefits and consumption is associated with reduced risk of

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
		of fish or 200 g shellfish)	6 = ≥3 serves/wk		AD/dementia[46,47]. MediCul is consistent with MEDAS[2] serves and cut point ≥ 3 serves/wk. The Heart Foundation recommends 2-3 serves oily fish/wk for all Australians in their position statement on fish and CV health[48].
8. Eggs	Q18 Egg intake	Eggs/wk	0 = ≥7 eggs/wk 1 = >4-6.99 eggs/wk 2 = 0-4 eggs/wk	2	Eggs were consumed in moderation in the traditional Med diet[1]. Some studies have associated egg intake with a higher risk of type 2 diabetes, and stroke in those with existing type 2 diabetes[49,50]. MediCul cut point is based on the original Med diet pyramid[51]. Goulet *et al.* [37] cut point 0-4 eggs/wk with a zero score for ≥7 eggs/wk. Ciccarone *et al.* [15] cut point 0-2 eggs/wk. MEDLIFE[43] cut point 2-4 eggs/wk. Spanish Med pyramid cut point 2-4/wk[52]. Eggs are not commonly assessed by Med diet index tools.
9. Dairy products	Q21 Dairy product intake	Serves/d (1 serve = half a cup (120 g) ricotta/cottage cheese, 50 g fetta, ¾ cup (200 g) yoghurt, 2 slices (40 g)	0 = >2 serves/d 2 = 0-2 serves/d	2	Dairy intake was moderately low in the traditional diet and did not focus on low fat products, popular in Western countries[28,39,51]. MediCul cut point relates to maximum exposure for total dairy of any type i.e., cow, sheep, goat, full fat, low fat, reduced fat. Serve size for fetta is provided based on calcium equivalence.

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
		hard yellow cheese)			
	Q22 Milk type	Response to which type of milk usually consumed	N/R Q included for qualitative purpose only	N/R	Not used in MediCul scoring.
10. White meat	Q15 White meat calculated preference	Serves/wk	0 = Q13 + Q14 serves/wk > Q15 + Q16 serves/wk 1 = Q13 + Q14 serves/wk = Q15 + Q16 serves/wk 2 = Q15 + Q16 serves/wk > Q13 + Q14 serves/wk OR Q13 + Q14 + Q15 + Q16 serves/wk = 0 (vegetarian)	2	Exposure to meat was low in the traditional Med diet[1]. Red meat in particular is associated with chronic disease risk, and may be related to risk of dementia[53,54]. MEDAS[2] includes a leading Q to assess white meat preference. While that MEDAS Q is embedded within MediCul (Q17) for the purpose of calculating a MEDAS score, this particular MediCul Q is designed to assess whether serves of white meat are consumed more frequently than serves of red meat. MediCul does not score for number of chicken serves.
	Q17 White meat subjective preference	Subjective response as to which is preferentially eaten: white, red or no meats	N/R Q included for MEDAS score only	N/R	Included to derive MEDAS[2] score, but not scored in MediCul as leading Q.

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
11. Red/processed	Q13 Red meat intake	Serves/wk (1 serve= 100-150 g)	0 = >3 serves/wk 1.5 = >1-3 serves/wk 3 = 0-1 serve/wk	3	Exposure to red meat was low in the traditional Med diet[28,55]. Red meat in particular is associated with chronic disease risk, and may be related to risk of dementia[53,54]. This Q is based on MEDAS[2] and the original Willett Med pyramid[51]. However, serves are based on commonly consumed portions in Australia rather than 65 g as defined in AGTHE[3]. MedDietScore[56] uses cut point ≤1/wk. MEDLIFE[43] uses cut point <2/wk. MIND diet[21] allows higher exposure to red meat and meat products <4 meals/wk. AGTHE[9] recommends not > 455 g/wk.
	Q14 Processed meat intake	Serves/wk (1 serve= 1 ½ thick or 2 thinner sausages; 2 rashers bacon; 4 slices processed meats (100 g); 1 meat pie, pastie, sausage roll; 6 chicken nuggets)	0 = >1 serve/wk 1.5 = 0.5-1 serve/wk 3 = 0-<0.5 serve/wk	3	Exposure to processed meat was low in the traditional Med diet[1]. Processed meat is strongly associated with chronic disease risk and mortality[57]. Q is based on MEDAS[2] Q. However, cut point is consistent with MEDLIFE[43] ≤ 1 serve/wk and Ciccarone *et al.* [15] 0 times/wk, which is closer to traditional intakes. This Q uses a similar serve size to that for fresh red meat so responses can be summed for MEDAS scoring. MEDAS cut point <7 serves/wk. Goulet *et al.* [37] cut point <1 portion (50-100g)/wk. MIND diet[21] allows higher exposure to red meat and meat products <4 meals/wk[21].
12. Sweets & sugary drinks	Q31 Biscuits/cakes frequency	Times/wk	0 = ≥2 times/wk 1 = 1-1.99	2	Sugar containing foods were rare in the traditional Med diet[1,51]. High sugar foods can increase insulin

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
			times/wk 2 = 0-0.99 times/wk		resistance, which is associated with significantly lower regional cerebral glucose metabolism and Alzheimer's disease[58]. This Q is based on MEDAS[2] Q but includes examples of more typical sweets in Australia and includes all sweets, not just 'commercial' types as in MEDAS. It excludes custard. MEDLIFE[43] cut point ≤2 serves/wk for all sweets. MEDAS cut point <3 times/wk for all sweets/pastries. MediCul scoring takes into account the effect of added sugars from additional sources assessed in other relevant Qs i.e., Q32b, Q33.
	Q32a Custard frequency	Times/wk	N/R Q included for MEDAS score only	N/R	This is not scored in MediCul but included to obtain a MEDAS[2] score for sweets/pastries. MEDAS includes custard as part of sweets/pastries.
	Q32b Ice cream frequency	Times/wk	0 = ≥2 times/wk 1= 1-1.99 times/wk 2 = 0-0.99 times/wk	2	Ice cream was not part of the traditional Med diet but is a popular dessert or snack in Australia[51]. MediCul scoring takes into account the effect of added sugars from additional sources assessed in other relevant Qs i.e., Q31, Q33. No other Med diet tools assess this.
	Q33 Sugary drinks intake	Cups/wk	0 = ≥2 cups/wk 1 = 1-1.99 cups/wk 2 = 0-0.99 cups/wk	2	Sugary drinks were rare in the traditional Med diet[1]. They can increase insulin resistance, which is associated with significantly lower regional cerebral glucose metabolism and Alzheimer's disease[58]. Q based on MEDAS[2] Q but provides standardised

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
					serves, whereas MEDAS simply asks re number of sugary drinks consumed per day. MediCul scoring takes into account the effect of added sugars from additional sources assessed in other relevant Qs i.e., Q31, Q32b.
	Q34 Fruit juice intake	Cups/wk	0 = >7 cups/wk 2 = 0-7 cups/wk	2	Intake of fruit juice was rare in the traditional Med diet, although some fruit syrups were home-made to offer to guests, diluted with water[1]. Q is included to assess excessive exposure to fruit juice which, like other sugary drinks, may increase the glycaemic load and promote weight gain and insulin resistance[59,60]. Q also allows fruit juice to be counted in total serves of fruit to derive a MEDAS[2] score.
	Q35 Fruit juice type	Response to type usually consumed: commercial or freshly squeezed	N/R Q included for MEDAS score only	N/R	This Q is not scored in MediCul. Type required for MEDAS scoring only, since 'natural fruit juices' counted as fruit. Natural fruit juices assumed to be freshly squeezed juices.
13. Takeaway	Q7 Hot chips frequency	Times/wk	0 = ≥2 times/wk 1 = 1-1.99 times/wk 2 = 0-0.99 times/wk	2	Hot chips were not part of the traditional Med diet but are common in Western diets. Hot chips may be a proxy for takeaway (fast food) consumption. Unlike boiled potato, fried potato contains significant acrylamide and AGEs content, associated with inflammation and negative health outcomes, such as cancer and neurotoxicity[61-64].

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
					Previous Med diet tools have grouped all potato products either with vegetables or grains. No other Med diet tools assess this.
	Q30 Takeaway frequency	Times/wk	0 = ≥2 times/wk 1 = 1-1.99 times/wk 2 = 0-0.99 times/wk	2	The traditional Med diet did not include takeaway (fast food) yet this is common in modern society and associated with negative health outcomes[55,65]. MIND diet cut point <1 times/wk for fast fried foods[21].
14. Water	Q36 Pure water intake	Cups/d	0 = 0-2.99 cups/d 2 = 3-4.99 cups/d 4 = ≥5 cups/d	4	Water was the main drink consumed traditionally[1]. Adequate intake is associated with reduced risk of fatal coronary heart disease[66] and dehydration with impaired cognitive performance[67,68]. Upper MediCul cut point is based on observational data and exceeds findings from MEDIS cross sectional analysis where estimated plain water intake by Greek-born Australians (from Med islands) is 947 ml/d[69]. No other Med diet tools assess this.
	Q38 Herbal tea intake	Cups/d	0 = Other teas or herbal tea <4 cups/wk 1 = ≥4 herbal tea cups/wk	1	Wild herbs were picked from the mountains and herbal tea was regularly consumed in the traditional diet[44]. Greek mountain tea is rich in polyphenols and may benefit cognition[70,71]. Green/black tea was not traditionally consumed so it is not scored, despite providing polyphenols. No other Med diet tools assess this.
	Q39 Tea type	Response to tea type mostly consumed	N/R	N/R	Included for qualitative purposes and to inform scoring for Q38.

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
					Although green/black tea contain polyphenols, they were not part of the traditional Med diet[1].
15. Alcohol	Q40 Alcohol drinking days frequency	Days/wk	0 = >5 days/wk 2 = 0-5 days/wk	2	Alcohol was consumed in the traditional Med diet but only with meals and in low amounts (usually diluted with water)[8]. MediCul cut point is based on NHMRC guidelines[72] which recommend 2 alcohol free days per week, as frequency is associated with increased intake.
	Alcohol standard drinks intake: Q41a F/S beer Q41b Light beer Q41c Wine Q41d Spirits	Standard drinks/wk	0 = >14 std drinks/wk 1 = >7-14 std drinks/wk 2 = 0-7 std drinks/wk	2	Alcohol is associated with cancer risk, all-cause mortality and promotes excessive energy intake[73-75]. Q assesses whether total alcohol intake is low, consistent with traditional intakes[8]. The upper cut point is deliberately conservative compared to other Med diet index tools as the negative effects of even small amounts of alcohol are now better appreciated, especially for cancer[76].
	Most alcohol is wine and consumed only with meals: Q42a Wine type Q42b With meals	N/R	0 = Wine not main drink or not exclusively consumed with meals 2 = Wine main drink & exclusively consumed with main meals	2	Drinking wine only with meals was customary in the Med diet[77] and may reduce negative effects of alcohol by slowing absorption rate. Both red and white wines were traditionally consumed and contain antioxidants[78]. Type is assessed in MediCul for qualitative purposes. MEDLIFE[43] cut point 1-2 serves/d (1 serve=1 cup); also awards points for both red/white wine. MEDAS[2] only scores for red wine and does not require consumption with meals.
16. Coffee	Q37a Coffee intake	Cups/d	0 = >2 cups/d unless de-	1	Caffeinated coffee was part of the traditional Med diet but at lower levels than commonly believed

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
			caffeinated 1 = ≤2 cups/d or any quantity de-caffeinated		since coffee beans were not grown in the region and expensive to buy[16,44]. This Q is a crude measure of coffee/caffeine exposure since it is difficult to assess intake without multiple Qs to determine variety of beans, roasting and brewing type, and volume of beverage consumed. Although some observational studies suggest higher intakes of coffee may benefit cognition and dementia risk, there is large methodological heterogeneity across studies precluding conclusions for these outcomes[79]. MediCul uses a conservative cut point as higher intakes of coffee are associated with increased myocardial infarction risk in individuals with the commonly observed risk variant of the CYP1A2 gene[80]. No other Med diet tools assess this.
	Q37b Caffeinated vs. non-caffeinated	Response to type of coffee mostly consumed	N/R	N/R	The response for this Q is included to inform scoring for Q37a.
17. Cuisine & lifestyle	Q6 Sofrito frequency	Times/wk	0 = 0-0.99 times/wk 1 = 1-1.99 times/wk 2 = ≥2 times/wk	2	Sofrito is a combination of tomato, olive oil and onion/garlic[81], used as basis of multiple Med dishes. It is high in phytonutrients including quercetin and lycopene, important for vascular function[82]. Because it is in a lipid matrix, sofrito facilitates increased bioavailability of phytonutrients contained in the vegetables and EVOO. Increased plasma lycopene is

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
					associated with decreased plasma and CSF IL-6 (an inflammatory marker)[83]. Q based on MEDAS[2] Q with cut point ≥ 2 times/wk.
	Q9 Herbs and spices frequency	Times/wk	0 = 0-3.99 times/wk 1 = ≥4 times/wk	1	Seasonings, particularly herbs, were used in traditional Med cuisine[1]. These provide antioxidants and anti-inflammatory phytonutrients and may reduce the formation of noxious chemicals during high temperature cooking e.g. AGEs, HCAs[84,85]. MediCul scoring rewards if exposure occurs on more than half the days per week. MEDLIFE[43] cut point ≥1 serves/d but also includes onion and garlic.
	Q10 Lemon/vinegar frequency	Times/wk	0 = 0-3.99 times/wk 1 = ≥4 times/wk	1	These condiments were regularly used in traditional cuisine. They may reduce the glycaemic load and retard formation of AGEs during/after cooking[62,86], as well as positively influence the microbiome to retard formation of TMA, a novel CVD risk factor[87]. A score for exposure to more than half the days per week is awarded. No other Med diet tools assess this.
	Fermented foods: Q11 Olives frequency Q23a Yoghurt frequency	Times/wk	0 = Q11 + Q23a + Q23b = 0-3.99 times/wk 1 = Q11 + Q23a + Q23b = ≥4 times/wk	1	Fermented foods were regularly consumed as part of Med cuisine and may provide benefits for the microbiome[25,88-90]. A novel combined exposure score for three fermented foods is calculated. MIND diet[21] criteria for total cheese <1 serve/wk.

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
	Q23b Fetta cheese frequency				No other Med diet tools assess exposure to fermented foods.
	Q43 Main meal home cooked frequency	Times/wk	0 = <5 Times/wk 1 = ≥5 Times/wk	1	Traditional Med cuisine involves home cooked meals[1]. In Western society, diet quality improves when cooking at home more often[91,92]. No other Med diet tools assess this.
	Q44 Main meal eaten alone frequency	Times/wk	0 = ≥5 Times/wk 1 = <5 Times/wk	1	Main meals were usually eaten in company, which provides social connectedness[93,94]. This Q rewards when main meals for most days per week are consumed in company rather than alone. No other Med diet tools assess this.
	Lower vs. higher AGEs cooking methods frequency: Q45 Warmer weather Q46 Cooler weather	Frequency	0 = Total higher AGEs (Q45 + Q46) ≥ total lower AGEs (Q45 + Q46) 1 = Total higher AGEs (Q45 + Q46) < total lower AGEs (Q45 + Q46)	1	Traditional cooking methods generally used high moisture and lower temperature[1]. High temperature, dry heat, cooking methods common in Western countries promote formation of AGEs[62]. AGEs are associated with dementia and other chronic diseases and their complications[64,95]. This novel Q assesses frequency of high vs. low AGEs cooking methods during warmer and cooler weather and awards a score when the majority of cooking is done using lower AGEs methods. Higher AGEs methods = a) grill, BBQ, dry fry b) shallow/deep fry c) roast/bake. Lower AGEs methods = d) boil/stew e) steam f) stir fry.
	Q47 Snacking frequency	Times/d	0 = >2 Times/d 1 = ≤2 Times/d	1	Frequent snacking was uncommon in the traditional Med diet. In Western countries frequent snacking is

Elements	Sub-elements	Description of Measure	Cut Points	Total Score	Rationale
					associated with increased energy intake and obesity[96,97].
	Q48 Fasting frequency	Days/yr	0 = no fasting 1 = any days/yr	1	The traditional Med diet was frugal and fasting from animal foods was regularly undertaken due to religious reasons[98,99]. Increasing dietary fibre from plant foods and limiting exposure to animal products may beneficially influence the microbiome[27]. Energy restriction is associated with improvement of multiple risk factors e.g., insulin resistance[100]. Q assesses any deliberate fasting which may involve energy restriction or avoidance of animal products. No other Med diet tools assess this.
	Q49 Fasting type	Response to indicate type usually practised	N/R	N/R	Included for qualitative purposes only. As regular fasting is generally uncommon in Western countries, no scoring is provided for type of fasting. No other Med diet tools assess this.
	Q50a Napping frequency	Days/wk	N/R	N/R	Napping after the midday meal was common in the traditional lifestyle and some studies in Mediterranean countries suggest short naps reduce risk of CVD[101,102]. Q is included for qualitative purposes and not scored in MediCul. No other Med diet tools assess this.
	Q50b Napping duration	Less than 30 mins 30 mins or longer	N/R	N/R	Q is included for qualitative purposes and not scored in MediCul. No other Med diet tools assess this.

Q, question; wk, week; Med, Mediterranean; MEDAS, Mediterranean Diet Adherence Screener used in PREDIMED study; d, day; N/R, not relevant or not scored for in MediCul; TBSP, tablespoon; g, grams; ml, millilitres; AGTHE, Australian Guide to Healthy Eating; CSIRO, Commonwealth Scientific and Industrial Research Organisation; EVOO, extra virgin olive oil; MIND, Mediterranean-DASH diet intervention for neurodegenerative delay diet; IMI, Italian Mediterranean Index; MEDIS, MEDiterranean ISlands study; CVD, cardiovascular disease; GI, glycaemic index; MEDLIFE, MEDiterranean LIFEstyle index; GLNC, Grains Legumes Nutrition Council; AD, Alzheimer's disease; MedDietScore, Mediterranean diet score; F/S, full strength; NHMRC, National Health Medical Research Council; std, standard; CSF, cerebrospinal fluid; TMA, trimethylamine; AGEs, advanced glycation end products; HCAs, heterocyclic amines.

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