



Table 4-B-II-5 Summary of Findings

Dietary patterns identified using factor analysis (FA) or cluster analysis (CA) and association with blood pressure and blood lipid measurements

Author, Year, Quality Rating, Study Design, Cohort	Sample Size, Location, Duration, Dietary Assessment, Methodology/Number Patterns	Age, Percent Female, Race/Ethnicity, Outcome/ Comparison, Number Events	Dietary Patterns Associated With Favorable Blood Lipids or Blood Pressure	Dietary Patterns With No Significant Association With Blood Lipids or Blood Pressure	Dietary Patterns Associated With Unfavorable Blood Lipids or Blood Pressure
Duffey et al, 2012 Neutral Prospective Cohort CARDIA study	N= 4,161 U.S. 20 years Dietary history CA: Two patterns	18 years to 30 years 59% Not reported Lipids and BP	Prudent diet (fruit, milk, yogurt, cheese, nuts, seeds, fish, and whole grains) vs Comparator Western diet (meats, poultry, refined grains, soda, fast food, fruit drinks, egg and egg dishes, legumes and snacks) <i>Low HDL-C: HR=0.87 (95% CI: 0.75, 0.99), P<0.05</i>	Prudent diet (fruit, milk, yogurt, cheese, nuts, seeds, fish and whole grains) vs. Comparator Western diet (meats, poultry, refined grains, soda, fast food, fruit drinks, egg and egg dishes, legumes and snacks) <i>High TGs: HR=0.80 (95% CI: 0.61, 1.05); NS</i> <i>High BP: HR=1.14 (95% CI: 0.87, 1.51): NS</i>	
Kimokoti et al, 2012 Positive Prospective Cohort Framingham Offspring/Spouse Cohort	N=1,146 U.S. Seven years FFQ (145-items) FA: Five patterns	25 years to 77 years 100% Not reported Lipids and BP		No pattern was associated with elevated BP, hypertriglyceride or HDL-C Heart healthier (vegetables, fruits, legumes, fish, whole grain, low-fat dairy milk) Lighter eating (fattier poultry and beer) Wine and moderate eating (wine, organ meats, eggs, high-fat dairy and snack foods) Higher fat (sweets and animal fats, refined grains, soft margarine, oils, diet beverages and desserts) Empty calorie (sweetened beverages, meat, mixed dishes and desserts)	



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Mikkilä et al, 2007 Positive Prospective Cohort Cardiovascular Risk in Young Finns Study	N=1,768 Finland 21 years 48-hour recall FA: Two patterns	Three years to 18 years Not reported Not reported Lipids and BP (B indicates the changes in predicted Z-score for outcome variable per unit increase in the pattern score)	Health-conscious pattern (high consumption of vegetables, fruit, root vegetables, fish, legumes and nuts, tea, rye, cheese and other dairy products and alcoholic beverages) <i>LDL cholesterol:</i> <ul style="list-style-type: none"> Women: B=-0.07 (0.03); P=0.01 Men: B=0.03 (0.02); NS 		Traditional pattern (high consumption of potatoes, sausages, milk, coffee, rye and butter) <i>LDL-C:</i> <ul style="list-style-type: none"> Women: B=0.08 (0.03), P<0.01 Men: B=0.07 (0.02), P<0.01 <i>SBP:</i> <ul style="list-style-type: none"> Women: B=0.08 (0.03); P=0.02 Men: B=0.02 (0.03); NS
Panagiotakos et al, 2008 Positive Prospective Cohort ATTICA	N=3,042 Greece Five years FFQ (156-item) FA: 15 components	18 years to 89 years 50% Not reported Lipids and BP	Component 2 (cereals, small fish, hardtack, and olive oil) : <i>SBP:</i> R=- 0.09, P=0.007 <i>LDL-C:</i> R=- 0.05, P=0.01 <i>HDL-C:</i> R=0.06, P=0.002 Component 15 (alcoholic beverages intake): <i>SBP:</i> R=0.15, P=0.01 <i>DBP:</i> R=0.09, P=0.06		Component 7 (sweets, red meat, margarine and nuts with salt): <i>SBP:</i> R=0.15, P=0.01 <i>DBP:</i> R=0.13, P=0.02 Component 8 (cheese and nuts with salt): <i>SBP:</i> R=0.13, P=0.03 <i>DBP:</i> R=0.13, P=0.03
	CA: Three patterns	Group 1 vs. Group 3	Group 1 (healthy dietary choices:		Group 3 (unhealthier choices:



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		Lipids	increased fish, nuts without salt, legumes, low-fat dairy, fruits and vegetables, potatoes, cereals, moderate red meat and poultry, and less coffee drinking) <i>Low LDL: 39% (±8%), P<0.001</i>		Reduced fish, nuts, legumes, dairy, fruits and vegetables, potatoes, cereals and poultry intake, but increased red meat, sweets and alcohol)
	CA: Three patterns	Group 2 vs. Group 3	Group 2 (Between healthy and unhealthy options: In the middle of the other groups in terms of consumption) <i>Low LDL: 22% (±5%), P<0.01</i>		Group 3 (unhealthier choices: Reduced fish, nuts, legumes, dairy, fruits and vegetables, potatoes, cereals and poultry intake, but increased red meat, sweets and alcohol)
Schulze et al, 2003 Positive Prospective Cohort EPIC-Potsdam	N=8,552 U.S. Two years to four years FFQ (148-item) FA: Two patterns	35 years to 64 years 100% Not reported Risk of hypertension <i>HTN incidence: SES</i>		Traditional cooking (meat, cooked vegetables, sauce, potatoes and poultry); NS Fruits and vegetables (fruits, raw vegetables and vegetable oil); NS	