



**Table 4-B-II-3 Summary of Findings**

*Dietary patterns identified using factor analysis (FA) or cluster analysis (CA) and association with risk of myocardial infarction (MI)*

| Author, Year, Quality Rating, Study Design, Cohort   | Sample Size, Location, Duration, Dietary Assessment, Methodology/Number Patterns                             | Age, Percent Female, Race / Ethnicity, Outcome / Comparison Number of Events  | Dietary Patterns Associated With Lower MI Risk  | Dietary Patterns With No Significant Association With MI   | Dietary Patterns Associated With Higher MI Risk |
|--|--|---|---|--|---|
| <p>Akesson et al, 2007</p> <p>Positive</p> <p>Prospective Cohort</p> <p>Swedish Mammography Cohort</p> | <p>N=24,444</p> <p>Sweden</p> <p>6.2 years</p> <p>FFQ (96-item)</p> <p>FA: Four patterns</p>                 | <p>48 years to 83 years</p> <p>100% Not reported</p> <p><b>MI (fatal and non-fatal),</b><br/>lowest vs. highest quintile</p> <p>MI: 308 cases</p> | <p><b>Healthy</b> (vegetables, fruits and legumes): RR=1.71 (95% CI: 1.14, 2.55), P<sub>trend</sub>=0.004</p> <p><b>Alcohol</b> (wine, liquor, beer and some snacks): RR=1.64 (95% CI: 1.09, 2.47); P<sub>trend</sub>=0.002</p> | <p><b>Western/Swedish</b> (red meat, processed meat, poultry, rice, pasta, eggs, fried potatoes and fish); NS</p> <p><b>Sweets</b> (sweets baked goods, candy, chocolate, jam and ice cream); NS</p>   |   |
| <p>Brunner et al, 2008</p> <p>Neutral</p> <p>Prospective Cohort</p> <p>Whitehall II Study</p>          | <p>N=7,731<br/>N for MI=7,033</p> <p>U.K.</p> <p>15 years</p> <p>FFQ (127-item)</p> <p>CA: Four patterns</p> | <p>Mean age 50 years</p> <p>30.25%</p> <p>Not reported</p> <p><b>Fatal CHD and Non-fatal MI</b><br/><b>Event Rates</b></p> <p>MI: 229 events</p>  |   | <p><b>Comparator</b></p> <p><b>Unhealthy</b> (white bread, processed meat, fries and full-cream milk)</p> <p><b>Mediterranean-like</b> (fruit, vegetables, rice, pasta and wine); NS</p> <p><b>Healthy</b> (fruit, vegetables, whole-meal bread, low-fat dairy and little alcohol); NS</p> <p><b>Sweet</b> (white bread, biscuits, cakes, processed meat, and high-fat dairy products); NS</p> |   |



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|--|---|--|--|---|---|
| <p>Nettleton et al, 2009</p> <p>Positive</p> <p>Prospective Cohort</p> <p>MESA</p> | <p>N=5,316</p> <p>U.S.</p> <p>Median age 4.6 years</p> <p>F F Q (120-item)</p> <p>FA: Four patterns</p> | <p>45 years to 84 years</p> <p>53%</p> <p>White: 43%</p> <p>Black: 24%</p> <p>Hispanic: 21%</p> <p>Chinese: 12%</p> <p>MI (fatal and nonfatal), highest vs. lowest quintile</p> <p>MI: 72 events</p> | <p><b>Whole grains and fruit</b> (whole grains, fruit, nuts and seeds, green leafy vegetables and low-fat dairy foods): HR=0.34 (95% CI: 0.12, 0.94); P<sub>trend</sub>=0.03</p> | <p>Stated in narrative, analysis not shown:</p> <p><b>Fats and processed meat</b> (added fats, processed meat, fried potatoes and desserts); NS</p> <p><b>Vegetables and fish</b> (several vegetable groups, fish, soup, Chinese foods, red meat, poultry and soy); NS</p> <p><b>Beans, tomatoes and refined grains</b> (beans, tomatoes, refined grains, high-fat dairy foods, avocado and red meat); NS</p> |   |