



**Question: What is the relationship between dietary patterns and risk of prostate cancer?**

**Table 2.** Summary of studies examining the relationship between dietary patterns and risk of prostate cancer (PCA)

Author, Year	Sample Size (Age)	Dietary Patterns**	Results	Summary of Findings
<b>Ax, 2014</b>  <b>Prospective Cohort Study (PCS); Sweden (Uppsala Longitudinal Study of Adult Men(ULSAM))</b>  <b>Risk of Bias: 8/24</b>	N=1,044 men (Age=70y)  133 cases; 13.2y	Modified Mediterranean diet score (mMDS)	There was no association between mMDS score and PCA (NS).	Adherence to a Mediterranean-like diet (assessed using the mMDS) was not associated with risk of prostate cancer.
<b>Bosire, 2013</b>  <b>PCS; US (NIH-AARP Diet and Health Study)</b>  <b>Risk of Bias: 2/24</b>	N=293,464 men (Age=50-71y)  23,453 cases; 8.9y	<ul style="list-style-type: none"> <li>• Healthy Eating Index (HEI-2005)</li> <li>• Alternate Mediterranean Diet Score (aMED)</li> <li>• Alternate Healthy Eating Index (AHEI-2010)</li> </ul>	<b>Total PCA:</b>  <i>HEI-2005:</i> Inversely associated with total PCA (Q1 vs. 5): HR=0.94, 95% CI=0.90-0.98; P for trend=0.01 <i>AHEI-2010:</i> Inversely associated with total PCA (Q1 vs. 5): HR=0.96, 95% CI=0.92-1.00; P for trend=0.009 <i>aMED:</i> NS association with PCA  <b>Total PCA stratified by PSA Screening History:</b>  <i>HEI-2005:</i> Inversely associated with total PCA (Q1 vs. 5): HR=0.92, 95% CI=0.86-0.98; P for trend=0.01 <i>AHEI-2010:</i> Inversely associated with total PCA (Q1 vs. 5): HR=0.93, 95% CI=0.88-0.99; P for trend=0.05 <i>aMED:</i> NS association with PCA.  <b>PCA Stage:</b>	Adherence to the Dietary Guidelines (assessed using the HEI-2005 and AHEI-2010) was associated with a lower risk of prostate cancer, particularly among men who had a PSA screening in the past 3 years, though men in the highest quintiles of both indices were more likely to report recent PSA screening. Adherence to a Mediterranean-like diet (assessed using the aMED) was not associated with prostate cancer risk.  In individual component analyses, higher scores on the fish component of aMED and the omega-3 component of the AHEI-2010, as well as the legume component of the aMED, were associated with lower risk of fatal prostate cancer risk.



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Author, Year  Study Design; Location (Cohort)  Risk of Bias	Sample Size (Age)  Number of PCA cases; Duration of Follow- up	Dietary Patterns**	Results	Summary of Findings
			<p><b>HEI-2005, AHEI-2010, aMED:</b> NS associations with either advanced or fatal PCA, regardless of PSA screening status (NS).</p> <p><b>Independent Risk for Specific Components:</b></p> <p><i>aMED:</i> Higher fish component scores were associated with lower fatal PCA (HR=0.79, 95% CI=0.65-0.96); Higher legume component scores were associated with higher fatal PCA (HR=1.26, 95% CI=1.03-1.53)</p> <p><i>AHEI-2010:</i> Higher omega-3 component scores were associated with lower fatal PCA (HR=0.94, 95% CI=0.90-0.98).</p>	
<p><b>Kenfield, 2013</b></p> <p><b>PCS; US (Health Professionals Follow-up Study)</b></p> <p><b>Risk of Bias: 0/24</b></p>	<p>N= 47,867 men (Age~54y)</p> <p>6,220 cases; 23.2y</p>	<ul style="list-style-type: none"> <li>• Mediterranean diet score (MDS)</li> <li>• Alternative MDS (aMDS)</li> </ul>	<p>There were no associations between MDS or aMDS scores and PCA (for total, advanced, lethal, fatal, low grade, or high grade disease) (NS).</p>	<p>Adherence to a Mediterranean diet (assessed using the MDS or the aMDS) was not associated with risk of developing prostate cancer.</p>
<p><b>Key, 2009</b></p> <p><b>PCS; US (European Prospective Investigation into Cancer and Nutrition EPIC-Oxford)</b></p>	<p>N=12,230 men (Age~45 y)</p> <p>235 cases; ~8y</p>	<ul style="list-style-type: none"> <li>• Vegetarians</li> <li>• Non-vegetarians</li> <li>• Meat eaters</li> <li>• Fish eaters</li> </ul>	<p>None of the dietary patterns identified were associated with PCA (NS).</p>	<p>None of the dietary patterns examined (vegetarian, non-vegetarian, meat eater, fish eater) were associated with risk of prostate cancer.</p>



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Study Design; Location (Cohort)	Number of PCA cases; Duration of Follow-up			
Risk of Bias				
<b>Risk of Bias: 9/24</b>				
<b>Muller, 2009</b> <b>PCS; Australia (Melbourne Collaborative Cohort)</b>	N=14,627 men (Age=~40-69y) 1,018 cases; 13.6y	<ul style="list-style-type: none"> <li>• "Mediterranean"</li> <li>• "Vegetable"</li> <li>• "Meat &amp; Potatoes"</li> <li>• "Fruit &amp; Salad"</li> </ul>	None of the dietary patterns identified were associated with PCA (for overall risk or tumor aggressiveness) (NS).	None of the dietary patterns identified using factor analysis.  ("Mediterranean," "Vegetable," "Meat & Potatoes," "Fruit & Salad") were associated with risk of prostate cancer.
<b>Risk of Bias: 5/24</b>				
<b>Tseng, 2004</b> <b>PCS; US (National Health and Nutrition Examination Study Epid. Follow-up)</b>	N=3,779 men (Age=58y) 136 cases; 7.6y	<ul style="list-style-type: none"> <li>• "Vegetable-fruit"</li> <li>• "Red meat-starch"</li> <li>• "Southern"</li> </ul>	None of the dietary patterns identified were associated with PCA (NS).	None of the dietary patterns identified using PCA ("Vegetable-fruit," "Red meat-starch," "Southern") were associated with risk of prostate cancer.
<b>Risk of Bias: 6/24</b>				
<b>Wu, 2006</b> <b>PCS; US (Health Professionals Follow-up Study)</b>	N=47, 725 (Age=~70y) 3,002 cases; 14y	<ul style="list-style-type: none"> <li>• "Prudent"</li> <li>• "Western"</li> </ul>	Neither of the dietary patterns identified was associated with PCA (for total, organ-confined, or advanced disease) (NS).	Neither of the dietary patterns identified using factor analysis ("Prudent," "Western") was associated with risk of prostate cancer.
<b>Risk of Bias: 0/24</b>				

\*Risk of Bias as determined using the Nutrition Evidence Library Bias Assessment Tool

\*\*Additional details regarding the dietary patterns, as reported by the authors, are found in the "Description of Evidence" section of the Evidence Portfolio