

## Cardiovascular Health Nova Scotia Guideline Update

*Nova Scotia Guidelines for Acute Coronary Syndromes* (Updating the 2008 Nutrition Intervention Section of the Guidelines)

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### STEMI and Non-ST Elevation Myocardial Infarction: Nutrition Intervention Update (May 2017)

2008 Recommendation		2016 Update Recommendation		Rationale for change
Non-Pharmacologic Secondary Preventive Therapy				
Nutrition Intervention Sections: 26 (NSTEACS) 27 (STEMI)		Nutrition Intervention Sections: 26 (NSTEACS) 27 (STEMI)		
26a 27a	A heart healthy diet is recommended. Such a diet is limited in sodium (<2.4 g/day), cholesterol (<200 mg/day), fat (<25-35% of total energy intake, saturated and trans fats (<7%), increased in monounsaturated (up to 20%) and polyunsaturated fats (up to 10%), increased in fruits and vegetables and limited in carbohydrates. [Class 1 Level B <sup>[1,2]</sup> ]	26 a 27a	A <b>heart healthy diet</b> is recommended and supported <sup>1,2,3,4,5</sup> ; healthy dietary patterns such as the Mediterranean, DASH, NCEP ATP III or vegetarian diets are encouraged. <b>These dietary patterns have similar recommendations:</b> <b>- Consume a diet rich in vegetables and fruits (at least 5 daily);</b> whole fruit and vegetables are preferred over juices. <b>-Limit sodium intake</b> (less than 2000 mg/day preferred <sup>6</sup> ) by limiting processed food, reducing salt in cooking and at the table and reading labels for	Modified Recommendation (changed text to update and include more practical recommendations)  New: Omitted dietary cholesterol restriction recommendation as majority of patients are not cholesterol responders.

2008 Recommendation		2016 Update Recommendation		Rationale for change
			<p>sodium content (5% or less sodium is best).</p> <ul style="list-style-type: none"> <li>- <b>Limit saturated fat</b> <sup>7,8</sup> by consuming lower fat dairy products and protein choices such as fish and poultry more often and partially replacing saturated fats with unsaturated fats<sup>7,8</sup>.</li> <li>-<b>Have meatless meals more often</b> by eating more vegetable proteins such as beans, peas, soybeans and other legumes.</li> <li>-<b>Encourage use of unsaturated fats</b> such as liquid vegetable oil (example: olive and canola oils) and soft margarine instead of butter, stick margarine and shortening; <b>use unsaturated fats in small quantities.</b></li> <li>-<b>Avoid trans fat</b><sup>1,2,3,4,5</sup> with the ultimate goal to eliminate altogether. Read food labels for trans fat content.</li> <li>-<b>Avoid any food labelled with palm or coconut oil as major ingredient.</b></li> <li>-<b>Include omega 3 sources of fat</b> such as salmon, mackerel and flax<sup>2,3,4</sup>.</li> <li>-<b>Include more soluble fibre</b> (oats, barley, pectin rich fruit, psyllium) <b>and insoluble fiber</b> in</li> </ul>	

2008 Recommendation		2016 Update Recommendation		Rationale for change
			diet; concentrate on wholegrains and gradually increase fiber towards <b>30 g/day</b> . <b>-Limit foods with added sugar and drinks like pop and juice.</b> (Consensus Nova Scotia 2016)	
<b>26b</b> <b>27b</b>	Patients should be encouraged to achieve and maintain a healthy weight (body mass index [BMI] 18.5-24.9 kg/m <sup>2</sup> ) and waist circumference (<102 cm men; <88 cm women). Overweight and obese patients should be offered support and advice. Dietary energy content should be aimed at reducing body weight by ~10% from baseline. <i>[Class1 Level B<sup>[1]</sup>; Class IIa, Level C<sup>[2]</sup>]</i>	<b>26 b</b> <b>27b</b>	Additional nutritional guidance may be required to lower cholesterol and/or triglyceride levels. <b>-A diet-based</b> approach to lowering cholesterol, (The Portfolio or Mediterranean Diets) with a focus on combining whole grains, fruit, vegetables, legumes, nuts, plant sterols and soy protein may be recommended. <sup>5</sup>  <b>-Behavior Change Interventions</b> are recommended and should be integrated into nutrition diagnosis interventions and therapies. Weight management through identification of readiness to change and level of motivation are recommended. (Consensus Nova Scotia 2016)	New Recommendation
<b>26c</b>	A clinical dietitian should be consulted for a comprehensive assessment in nutritionally	<b>26c</b> <b>27c</b>	All patients admitted with acute coronary syndromes should be counselled regarding lifestyle	Modified recommendations (changed text)

2008 Recommendation		2016 Update Recommendation		Rationale for change
	compromised patients requiring nutrition support/intervention.		modifications either as an inpatient or outpatient and/or through a cardiac rehabilitation program if available. (Consensus Nova Scotia 2016)	
		<b>26d</b> <b>27d</b>	Limit alcohol use. If alcohol is consumed, limit the number of drinks to 2/day (women) and 3/day (men) <sup>9</sup> . (Consensus Nova Scotia 2016)	New Recommendation

## **Nova Scotia Guidelines for Acute Coronary Syndromes 2008**

### **References: STEMI**

<sup>1</sup> Antman EM, Anbe DT, Armstrong PW, et al. ACC/AHA guidelines for the management of patients with ST-elevation myocardial infarction – executive summary: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Revise the 1999 Guidelines for the Management of Patients With Acute Myocardial Infarction). *Circulation*. 2004;110(5):588-636.

<sup>2</sup> O’Gara PT, Kushner FG, Ascheim DD, et al. ACCF/AHA guidelines for the management of ST-elevation myocardial infarction – executive summary: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines *J Am Coll Cardiol*. 2013; 61(4):1-26.

### **References: NSTEMACS**

<sup>1</sup> Anderson JL, Adams CD, Antman EM, et al. ACC/AHA 2007 Guidelines for the management of patients with Unstable Angina/Non-ST-Elevation Myocardial Infarction: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Revise the 2002 Guidelines for the Management of Patients With Unstable Angina/Non-ST-Elevation Myocardial Infarction) developed in collaboration with the American College of Emergency Physicians, the Society for Cardiovascular Angiography and Interventions, and the Society of Thoracic Surgeons endorsed by the American Association of Cardiovascular and Pulmonary Rehabilitation and the Society for Academic Emergency Medicine. *J Am Coll Cardiol*. 2007; 50(7):e1-e57.

<sup>2</sup> Bassand JP, Hamm CN, Ardissino D, et al; for the Task Force for Diagnosis and Treatment of Non-ST-Segment Elevation Acute Coronary Syndromes of European Society of Cardiology. Guidelines for the diagnosis and treatment of Non-ST-segment Elevation Acute Coronary Syndromes. *Eur Heart J*. 2007; 28(13):1598-1600.

## References for Update 2017

<sup>1</sup> Eckel RH, Jakicic JM, Ard JD, et al. 2013 AHA/ACC Guidelines on Lifestyle Management to Reduce Cardiovascular Risk. *Circulation*. 2014;129(suppl2):S76-99.

<sup>2</sup> Smith SC, Benjamin EJ, Bonow RO, et al. AHA/ACC Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and other Atherosclerotic Vascular Disease: 2011 Update. *Circulation*. 2011;124:2458-2473.

<sup>3</sup> European Society of Cardiology. European Guidelines on Cardiovascular Disease Prevention in Clinical Practice (version 2016). *Eur. Heart J.* 2016 doi:10.1093/eurheartj/ehw106

<sup>4</sup> World Health Organization. Prevention of Cardiovascular Disease: Guidelines for assessment and management of total cardiovascular risk. 2007. ISBN 978 92 4 154717 8

<sup>5</sup> Anderson T, Gregoire J, Pearson GJ, et al. 2016 Canadian Cardiovascular Society Guidelines for the Management of Dyslipidemia for the Prevention of Cardiovascular Disease in the adult DOI: <http://dx.doi.org/10.1016/j.cjca.2016.07.510> in press

<sup>6</sup> Hypertension Canada. CHEP Guidelines for the Management of Hypertension. 2016 Retrieved from: <http://guidelines.hypertension.ca/wp-content/uploads/2016/05/16156-English-CHEP-Full-recs-V9.pdf>, March 8, 2017.

<sup>7</sup> Cochrane Review: Hooper L, Martin N, Abdelhamid A, Davey Smith G. Reduction in saturated fat intake for cardiovascular disease. Cochrane Database of Systematic Reviews 2015, Issue 6. Art. No. : CDO11737. DOI: 10.1002/14651858.CD011737. [www.cochranelibrary.com](http://www.cochranelibrary.com)

<sup>8</sup> Dietitians of Canada. PEN the Global Resource for Nutrition Practice. Cardiovascular Disease: Is a reduced saturated fat diet recommended for primary or secondary cardiovascular disease prevention? 2006-11-23.

<sup>9</sup> Centre for Addiction and Mental Health National Alcohol Strategy Advisory Committee. Canada's Low-Risk Alcohol Drinking Guidelines. 2011 Retrieved from: [http://www.camh.ca/en/hospital/health\\_information/a\\_z\\_mental\\_health\\_and\\_addiction\\_information/alcohol/Pages/low\\_risk\\_drinking\\_guidelines.aspx](http://www.camh.ca/en/hospital/health_information/a_z_mental_health_and_addiction_information/alcohol/Pages/low_risk_drinking_guidelines.aspx) March 8 2017.