

KNOW YOUR



Date: _____

The **health of your heart** can be estimated by using a cardiovascular (heart) risk calculator. Along with your health care provider, you can see how likely you are to develop **cardiovascular/heart disease (such as a heart attack or stroke) in the next 10 years.**

These are two available tools:

**Framingham
Risk Score**

www.ccs.ca/frs

**PEER Cardiovascular
Decision Aid**

www.decisionaid.ca/cvd/

Based on today's assessment, my risk of having a heart attack or stroke in the next 10 years is:

<input checked="" type="checkbox"/> CHECK	Based on today's assessment, my risk of having a heart attack or stroke in the next 10 years is:		
	Low risk	less than 10%	Statin likely not needed.
	Intermediate risk	between 10% and 20%	Statin use suggested.
	High risk <u>OR</u> I have diabetes, heart disease, or chronic kidney disease	20% or higher	Statin use recommended.

PROTECT YOURSELF FROM HEART DISEASE:

Lifestyle changes, such as physical activity, healthy eating, and quitting smoking, improve your heart health at ALL risk levels. Based on your risk level, your provider may talk to you about **taking a statin**. Statins are one of the most prescribed medications.

HOW STATINS CAN HELP:

1. **Statins save lives:** They are the only cholesterol-lowering medication that is proven to help you live longer.

2. Taking a statin lowers your cholesterol and **decreases** your chance of having a **heart attack or stroke by 25%**. The higher your risk, the greater the benefit of a statin.

Here are some examples of how this works:



Chance of having a heart attack or stroke in the next 10 years:	Effect of taking a statin:	New 10 year risk on a statin:
Intermediate risk of 10%		10% → 7.5%
High risk of 25%	↓ risk of heart disease by 25%	25% → 19%
Your current risk of _____ %		New risk on a statin: _____ %

STATIN MYTHS



STATIN FACTS

You don't need to eat healthy if taking a statin.



It is still important to make **lifestyle changes** such as eating healthy foods, increasing physical activity, limiting alcohol, quitting smoking and managing stress.

Statins have a lot of side effects.



Most people don't have side effects from statins. If you have problems with one, there are **other statin options** available or different doses to try. All statins are not the same.

Statins cause muscle pain.



Muscle pain is rarely caused by a statin.^{2,3} Rule out other causes such as intense activity or joint problems. Very few people (about 1 in 10,000) have serious muscle damage from statins.²

You can't take a statin again if you had muscle pain in the past.



Most people can tolerate a statin when they try again.⁴⁻⁶ See [RxFiles Statin Intolerance Tool](#).



Statins cause memory loss.



This has been well-studied, showing **no link between statins and memory loss or dementia.**⁷ Some people report having "fuzzy" thinking, but these effects are reversible.

Statins cause type 2 diabetes.



Statins modestly increase the risk of diabetes in 1 out of 150 people who are borderline diabetic.⁸⁻¹⁰ **The large heart benefits far outweigh the small risk of diabetes for most people.**

Statins damage your liver.



Statins are safe in people with liver disease. In fact, they are often recommended in people with liver disease to improve their heart health. Liver damage with statins is exceptionally rare.¹¹⁻¹⁴

Statins cause cancer.



This claim has been debunked, with studies over many years showing **no link between statins and increased risk of cancer.**^{15,16}

Acknowledgements: Written by Taisa Trischuk. **Thank you to our reviewer:** Jessica Visentin.

Disclaimer: RxFiles Academic Detailing is part of the College of Pharmacy and Nutrition at the University of Saskatchewan. The content of this work represents the research, experience and opinions of the authors and not those of the University of Saskatchewan. Neither the authors nor the University of Saskatchewan nor any other party who has been involved in the preparation or publication of this work warrants or represents that the information contained herein is accurate or complete, and they are not responsible for any errors or omissions or for the result obtained from the use of such information. Any use of the materials will imply acknowledgment of this disclaimer and release any responsibility of the University of Saskatchewan, its employees, servants or agents. Readers are encouraged to confirm the information contained herein with other sources.

References for “Deciding if a Statin is Right for You / Statin Myths vs Statin Facts:”

1. Kolber MR, Klarenbach S, Cauchon M, et al. **PEER simplified lipid guideline 2023 update:** Prevention and management of cardiovascular disease in primary care. *Can Fam Physician.* 2023 Oct;69(10):675-686.
PEER Simplified Lipid Guidelines 2023 update. Supplementary Appendix 1D: Supplemental Questions. Chapter 1-10.
2. Cholesterol Treatment Trialists' Collaboration (**CTTC 2022**). Effect of statin therapy on muscle symptoms: an individual participant data meta-analysis of large-scale, randomised, double-blind trials. *Lancet.* 2022; 400(10355):832-845.
3. Falk J, Paige A, Dugré N, Allan GM. Risk of muscle symptoms while taking statin. *Canadian Family Physician* May 2023; 69 (5) 337.
4. Zhang H, et al. Discontinuation of statins in routine care settings: a cohort study. *Ann Intern Med.* 2013;158(7):526-534.
5. Stein EA, et al. Efficacy and tolerability of fluvastatin XL 80 mg alone, ezetimibe alone, and the combination of fluvastatin XL 80 mg with ezetimibe in patients with a history of muscle-related side effects with other statins. *Am J Cardiol.* 2008;101(4):490-496.
6. Saxon DR, Eckel RH. Statin intolerance: a literature review and management strategies. *Prog Cardiovasc Dis.* 2016;59(2):153-164.
7. McGuinness B, Craig D, Bullock R, Passmore P. Statins for the prevention of dementia. *Cochrane Database Syst Rev.* 2009 Apr 15;(2):CD003160. doi: 10.1002/14651858.CD003160.pub2. Update in: *Cochrane Database Syst Rev.* 2016 Jan 04;(1):CD003160.
8. Sattar N, Preiss D, Murray HM, Welsh P, Buckley BM, De Craen AJ, et al. Statins and risk of incident diabetes: a collaborative meta-analysis of randomised statin trials. *Lancet* 2010;375:735-42.
9. Maki K, Diwadkar-Navsariwala V, Kramer M. Statin use and risk for types 2 diabetes: what clinicians should know. *Postgraduate Medicine*;2018;130(2):166-72.
10. Waters DD, Ho JE, DeMicco DA, et al. Predictors of new-onset diabetes in patients treated with atorvastatin: results from 3 large randomized clinical trials. *J Am Coll Cardiol.* 2011 Apr 5;57(14):1535-45.
11. Rinella ME, Neuschwander-Tetri BA, Siddiqui MS, et al. AASLD Practice Guidance on the clinical assessment and management of nonalcoholic fatty liver disease. *Hepatology.* 2023 May 1;77(5):1797-1835.
12. Abdallah M, Brown L, Provenza J, Tariq R, Gowda S, Singal AK. Safety and efficacy of dyslipidemia treatment in NAFLD patients: a meta-analysis of randomized controlled trials. *Ann Hepatol.* 2022;27:100738.
13. Cohen DE, Anania FA, Chalasani N; for the National Lipid Association Statin Safety Task Force Liver Expert Panel. An assessment of statin safety by hepatologists. *Am J Cardiol.* 2006;97(8A):77C-81C.
14. National Lipid Association Statin Safety Assessment Task Force. *Am J Cardiol.* 2006;97(8A):89C-94C
15. Cholesterol Treatment Trialists' Collaboration (**CTTC 2019**). Efficacy and safety of statin therapy in older people: a meta-analysis of individual participant data from 28 randomized controlled trials. *Lancet.* 2019;393(10170):407-15.
16. Cholesterol Treatment Trialists' Collaboration (**CTTC 2022**). Effect of statin therapy on muscle symptoms: an individual participant data meta-analysis of large-scale, randomised, double-blind trials. *Lancet.* 2022; 400(10355):832-845.
17. Pearson GJ, Thanassoulis G, Anderson TJ, et al. **2021 Canadian Cardiovascular Society Guidelines** for the Management of Dyslipidemia for the Prevention of Cardiovascular Disease in Adults. *Can J Cardiol.* 2021 Aug;37(8):1129-1150.