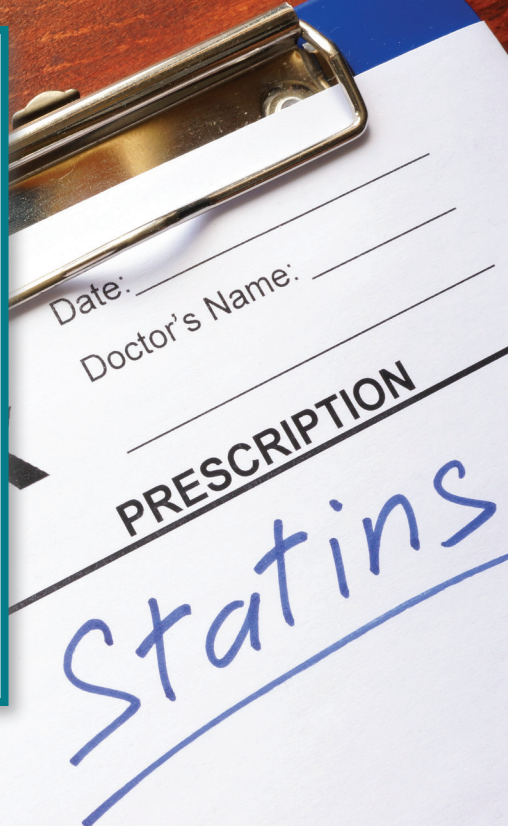


# Statin Medications

**S**tatin medications are generally prescribed to help lower cholesterol. In recent years, however, many misconceptions about statin medications have been widely circulated, causing some users to question if the drugs are safe to use or needed at all. In truth, there has been little to no science backing these false claims.

You should feel confident in your prescription drug use, and we're here to help you understand the science behind statin use. Knowing the truth will help clear the confusion caused by these common myths.



## SEPARATING

# Truth

FROM

# Myth

## Myth #1

## Statins are all hype with little benefit

Statins are one of the most valuable medications on the market in terms of the health benefits they provide. In comparison to other cardiovascular health medications such as aspirin, statins provide greater benefits with few side effects. Data show statins are highly cost effective for patients with risk factors for cardiovascular disease.<sup>1</sup>

Statins have been studied extensively in a variety of people. The most recent studies show that patients who take statins have a lower risk for cardiovascular events, such as heart attacks, strokes or death.

In people who have had a heart attack, stroke, mini-stroke or blockages in other blood vessels (like the legs), taking a statin for four to five years has the following impacts.



Prevents **one** cardiovascular event for every **20** people treated<sup>2</sup>

Prevents **one** death for every **50** people treated<sup>3</sup>



In people who haven't had a cardiovascular event, taking a statin for four to five years has the following impacts.



Prevents **one** cardiovascular event for every **50** people treated<sup>2</sup>

Prevents **one** death for every **200** people treated<sup>3</sup>

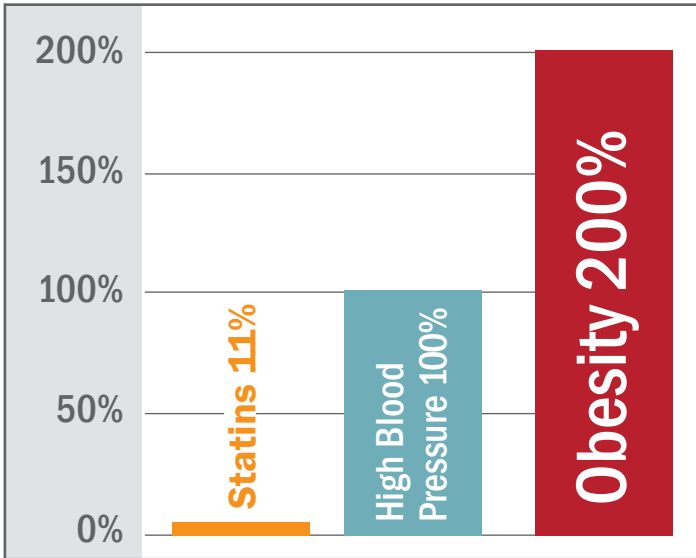


## Myth #2

## Statins will cause diabetes

A small increase in fasting blood sugar may occur with statin therapy, possibly leading to diabetes in patients who already have risk factors for it.

Statins increase the risk of diabetes by about **11 percent**, while high blood pressure increases risk of diabetes by **100 percent** and obesity increases the risk by **200 percent**.

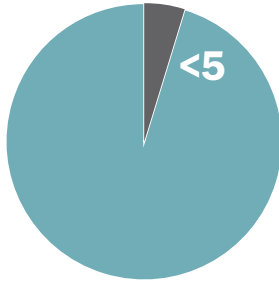


Statins don't appear to cause sudden onset diabetes, and the benefits of statins outweigh the potential for diabetes. You can also reduce your diabetes risk through lifestyle changes such as maintaining a healthy weight, exercising and eating a healthy diet.<sup>4</sup>

## Myth #3

## Statins will cause muscle pain

If you experience muscle pain while on a statin, talk to your personal doctor about it.

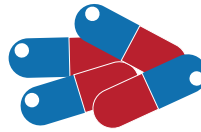


**Less than 5 percent of people on statins will develop muscle pain.**<sup>2</sup>

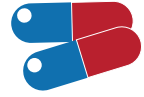
If the pain is related to the medication, you may be able to take a different statin medication, reduce your dose or change the frequency (for example, taking three times a week instead of daily).



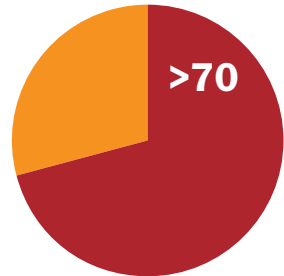
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**More than 70 percent of statin users who experience muscle symptoms won't have the same issue with a different statin or a different dose.**<sup>2,5</sup>



Although all statins function in the same way to lower cholesterol, there are differences in the way they are distributed throughout the body. Some statins enter body tissues like muscle more easily and can be associated with a higher rate of muscle pain.<sup>6</sup> If you experience muscle pain while on a statin, you may be able to tolerate a different one that does not enter muscle tissue as easily, such as rosuvastatin, pravastatin or fluvastatin.

## Myth #4

### Statins aren't needed if cholesterol levels are OK

Statins have benefits beyond lowering cholesterol, including antioxidant effects which can minimize inflammation, also lowering the chance of heart attack or stroke.<sup>7</sup>



For example, current diabetes guidelines say a statin should be started regardless of cholesterol levels in people between 40 and 75 years of age. **Starting a statin as**

**a preventive measure, before cholesterol levels are unhealthy, can decrease risk of heart attack and stroke.** People with diabetes who are younger than 40 or older than 75 should talk to their personal doctor before starting or continuing statin use.<sup>8</sup>

## Myth #5

### Statins will cause dementia

There is no demonstrated link between statin use and the development of dementia. Dementia is a blanket term to describe the symptoms that impact memory, thinking and social abilities. Alzheimer's disease is the most common cause of dementia.

On the other hand, several studies have suggested a lower risk of dementia in people taking statins.<sup>9</sup> While more studies are needed to determine the exact ways that statins might reduce the risk of dementia, there is no evidence to suggest that statins cause dementia.



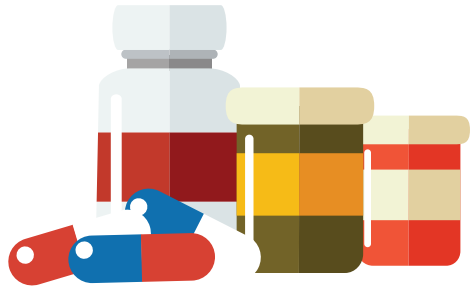
## Myth #6

### Other prescriptions used to lower cholesterol are as good or better than statins

Findings from the American College of Cardiology Task Force show that statins are “the most effective initial therapy” and should be considered the first line of defense for people with a history of diabetes, cardiovascular disease or high cholesterol.

If additional therapy is needed for a patient already on a statin, the task force recommends ezetimibe (Zetia) as an optional add-on medication.<sup>10</sup> Ezetimibe alone can lower cholesterol, but it has not been found to lower the risk of heart attack or stroke.

Other therapies, such as niacin, fibrates and cholestyramine, may reduce cholesterol, but they also have not been found to reduce heart attack or stroke.<sup>2</sup>



## Myth #7

### Over-the-counter (OTC) products, like red yeast rice, are a better alternative to statins

While red yeast rice may have cholesterol lowering properties, a safe and helpful dose has not yet been found. Since many red yeast rice products work similarly to statins, the chance of side effects is likely similar. There is also concern that the product could be tainted with unlabeled ingredients.

Though non-prescription remedies might play a role in managing chronic diseases, these remedies alone are not replacements for treatment and lifestyle changes.

# TRUTH

## **Statin use, coupled with a healthy lifestyle, can reduce risk of heart attack and stroke**



A variety of tactics like eating a healthy diet, increasing physical activity and taking your medications as prescribed are collectively important in helping you maintain and improve your health. Taking a statin can further reduce your risk of stroke or heart attack, allowing you to live a healthier life so you have more time to enjoy the things you love.

**If you have questions, please contact a Network Health pharmacist by calling 888-665-1246 (TTY 800-947-3529) Monday-Friday from 8 a.m. to 5 p.m. or emailing [pharmacist@networkhealth.com](mailto:pharmacist@networkhealth.com).**



<sup>1</sup> Lazar LD, Pletcher MJ, Coxson PG, Bibbins-Domingo K, Goldman L. Cost-effectiveness of statin therapy for primary prevention in a low-cost statin era. *Circulation*. 2011;124(2):146-153. doi:10.1161/CIRCULATIONAHA.110.986349

<sup>2</sup> Improve Patient Adherence to Statins. *Pharmacist's Letter*. 2017; 33(11). Detail-Document#: 331101. <https://pharmacist.therapeuticresearch.com/Content/Articles/PL/2017/Nov/Improve-Patient-Adherence-to-Statins>. Accessed June 29, 2018.

<sup>3</sup> Boehringer S, Blackwelder, RB, Darby-Stewart A, et al. Helping Patients Adhere to Statins. <https://pharmacist.therapeuticresearch.com/Content/Segments/PRL/2017/Nov/Helping-Patients-Adhere-to-Statins-11649>. Published Oct 10, 2017. Accessed June 29, 2018.

<sup>4</sup> Turgeon R, Allan GM. Statin-induced diabetes: too sweet a deal? *Can Fam Physician*. 2013; Jul; 59(7); e311.

<sup>5</sup> Parker B, Capizzi J, Grimaldi A, et al. Effect of statins on skeletal muscle function. *Circulation*. 2013; Jan 1;237(1):96-103. doi: 10.1161/CIRCULATIONAHA.112.136101.

<sup>6</sup> Davignon J. Beneficial cardiovascular pleiotropic effects of statins. *Circulation*. 2004; Jun 15;109(23 Suppl 1):III39-32. doi: 10.1161/0.1CIR.0000131517.20177.5a.

<sup>7</sup> Bitzur R, Cohen H, Kamari Y, Harats D. Intolerance to statins: mechanisms and management. *Diabetes Care*. 2013;36 Suppl 2(Suppl 2):S325-S330. doi:10.2337/dcS13-2038

<sup>8</sup> American Diabetes Association. Standards of Medical Care in Diabetes – 2018. *Diabetes Care*. 2018; Jan; 41(Suppl 1):S1-S159.

<sup>9</sup> Rosenson RS. Statins: Actions, side effects, and administration. In: Freeman MW, ed. Waltham, Mass: UpToDate; 2018. Accessed June 29, 2018

<sup>10</sup> Lloyd-Jones DM, Morris PB, Ballantyne CM, et al. 2016 ACC Expert Consensus Decision Pathway on the Role of Non-Statins Therapies for LDL-Cholesterol Lowering in the Management of Atherosclerotic Cardiovascular Disease Risk: A Report of the American College of Cardiology Task Force on Clinical Expert Consensus Documents. *J Am Coll Cardiol*. 2016; Jul 5; 68(1):92-125. doi: 10.1016/j.jacc.2016.03.519.