

On Thu, Jan 13, 2022 at 2:25 PM Adam Franklin <editaneous@gmail.com> wrote:

Hi, Sara!

This one was TOUGH! I'm not a well-versed medical or nutritional editor, so I had to make some judgement calls. There is also a nice paragraph of heart disease statistics that is hard to place appropriately in the article. You are probably able to find a better place (maybe the original location?). I really hope that Leah Prost is ok with my proposed changes!

And thank you for reaching out! I really appreciate it! I really enjoy the editing and you're so easy to work with! Please feel free to get in touch any time!

Truly,
Adam Franklin, Editor
(971) 246-2381
editaneous@gmail.com

Empowered Health
February 2021 submission to "Tumbleweird"

Lifestyle Habits for Healthy Cholesterol Levels
by Haley Scellick, ARNP

We have all heard of cholesterol. ~~W~~But what exactly is cholesterol and what are the different types? How do we check for problems ~~with cholesterol~~? At what age should we be screening for problems ~~with cholesterol~~? ~~H~~And how do we manage high cholesterol ~~from~~with lifestyle interventions? ~~These are all questions that will be discussed in this article.~~

Cholesterol is a waxy, fat-like substance found in all the cells of your body. Your body makes and needs cholesterol to create hormones, vitamin D, and substances that help you digest food. Cholesterol is also found in animal-sourced foods such as egg yolks, meat, and cheese. But there can be too much of a good thing.

If you have too much cholesterol in your blood, it can combine with other substances to form plaque. This plaque sticks to the walls of arteries and can lead to coronary artery disease, which is when the arteries in your heart become narrow or even blocked. This could lead to a heart attack or stroke.

Heart disease is the #1 killer in the United States and is rapidly growing. It affects 1 in 4 adults (about 85 million Americans). It is estimated ~~that 7% of U.S. children ages 6-19 have high cholesterol and~~ that 90%

Commented [AF1]: I believe this was the intent. If lifestyle interventions are instead a problem, then this can stand as-is.

Commented [AF2]: Changed just to avoid the close repetition.

Commented [AF3]: I feel like this paragraph really should lead since it has that "alarm" quality to it. However, since the link between cholesterol and heart disease is not made in this article, it's hard to actually find the best place for this.

Commented [AF4]: This stat, though very interesting, is out of place here and detracts from the heart disease stats.

of heart disease is preventable. This ~~is indicating~~ that lifestyle factors are at the forefront of our approach to preventing and treating heart disease.

~~Cholesterol is a waxy, fat like substance that is found in all cells in your body. Your body makes and needs cholesterol to make hormones, vitamin D and substances that help you digest your food. Cholesterol is found in foods from animal sources such as egg yolks, meat and cheese.~~

~~Too much of a good thing is at play here. If you have too much cholesterol in your blood, it can combine with other substances in the blood to form plaque, which sticks to the walls of arteries and can lead to coronary artery disease, where the arteries in your heart become narrow or worse, blocked. This could lead to a heart attack or stroke.~~

There are different types of cholesterol: ~~A~~ and all are a combination of fats (lipids) and proteins.

> HDL (high density lipoprotein) is “good cholesterol” that carries cholesterol ~~from other parts of your body back~~ to your liver which ~~is then removed~~ ~~it~~ from your body.

> LDL (low density lipoprotein) ~~or the~~ “bad cholesterol” because at high levels can lead to ~~a~~ build up of plaque in your arteries.

Triglycerides are the fat content ~~of in~~ the blood; ~~e~~Excess carbohydrates ~~gets stored~~ ~~become as~~ fat.

> VLDL (very-low-density lipoprotein) ~~is made by~~ your liver ~~makes~~ VLDL and ~~releases~~ ~~it~~ into your bloodstream. ~~The~~ VLDL particles mainly ~~carry~~ triglycerides. ~~VLDL is similar to LDL cholesterol, but LDL mainly carries cholesterol to your tissues instead of triglycerides.~~

The term dyslipidemia means there is a problem with cholesterol metabolism. This could lead to increased levels of ~~both~~ total ~~cholesterol~~ and LDL cholesterol, a varied presentation of triglycerides, and/or decreased HDL. Problems with cholesterol can be ~~either~~ genetic ~~in regard to family history~~ or acquired. Acquired dyslipidemia can result from obesity, medications, excess alcohol, metabolic disorders, liver disease, and other causes such as anorexia.

Familial hypercholesterolemia (elevated cholesterol) is the most common congenital metabolic disorder resulting from a mutation ~~in the LDL receptor or another mutation in protein genes~~ which ~~does~~ not allow the ~~cells~~ body to rid ~~themselves~~ itself of LDL cholesterol through the liver. High cholesterol ~~itself~~ does not typically present with symptoms which makes this more imperative to ~~check~~ ~~screen~~ in ~~both~~ adults and ~~screen~~ children ~~as well~~. The cholesterol panel is an indication of overall cardiovascular disease.

At Empowered Health, we pair this cholesterol panel with other markers of overall inflammation and insulin resistance ~~as for~~ a more comprehensive approach to predicting cardiovascular events.

When to begin screening?

Screening for cholesterol should begin around 9-11 years of age. ~~P~~For patients that have a strong family history of heart disease or high cholesterol, it is recommended to begin a lipid profile at this time and then again around 17-19 years of age. Adults should have cholesterol panels more often.

Lifestyle Management:

Dietary changes are ~~at~~ the forefront of lifestyle intervention, ~~that really begin from birth~~. Too many carbohydrates in our daily diet are being stored as fat due to ~~an~~ overconsumption ~~vs what is needed for fueling our bodies~~. This increased fat ~~causes~~ ~~further~~ ~~complicates~~ ~~matters~~ ~~through~~ insulin resistance ~~to further complicate matters~~. Making changes in our diets is a great first step. Consider:

Commented [AF5]: Moved to beginning of article as an expanded, but still general, definition.

Commented [AF6]: Changed for parallelism.

Commented [AF7]: Should this also get an arrow?

Commented [AF8]: Changed for parallelism.

Commented [AF9]: This indicates that cholesterol carries cholesterol. Is this correct? If so, so clarification is needed. Due to time restraints, however, I have the struck the sentence as a whole.

Commented [AF10]: This feels like unnecessary detail for a general audience.

Commented [AF11]: I believe that screening and checking are the same thing in this context. I may very well be incorrect, though.

Commented [AF12]: Is a lipid profile the same as a cholesterol panel? They sound interchangeable in this paragraph.

Commented [AF13]: Removed since an infant has limited options for food (breast milk or formula), and so this doesn't land quite right. As well, change indicates a prior state, which again does not apply to an infant.

- Increasing fiber in our diets ~~from foods is so important~~
- Switching olive oils, or avocado oils can drop LDL cholesterol
- Refraining from corn-fed red meat
- ~~Increasing V~~vegetables ~~are~~ (the top nutrient-dense foods; high in vitamins, minerals, and fiber)
- ~~Increasing N~~nuts and seeds, ~~which~~ are rich in fiber and healthy fats that assist with lowering cholesterol and decreasing triglycerides
- ~~Adding in F~~fatty fish, such as salmon, ~~which~~ are packed with omega-3 fatty acids which relieve inflammation and decrease cholesterol
- ~~Using T~~turmeric, ~~which~~ is a powerful compound that can reduce levels of ~~total and LDL and total~~ cholesterol ~~in the blood~~
- ~~Increasing G~~gluten-free whole grains, ~~such as buckwheat, quinoa, and brown rice, which~~ have been associated with lower levels of cholesterol and improved heart health, ~~such as buckwheat, quinoa and brown rice~~
- ~~Foods to avoid~~Avoid: sugar and ~~other~~ refined carbohydrates, alcohol, caffeine, and trans fats. ~~Lastly, smoking causes detrimental effects on the arteries and increased plaque formation~~

Commented [AF14]: Switching to or from?

Commented [AF15]: Swapped for ease of reading.

Commented [AF16]: If this remains on the list, it should get its own bullet because it is not a food. However, since this is an article about cholesterol, this should be removed unless it is clearly linked to cholesterol.

Exercise:

~~When it comes to reducing cholesterol levels, g~~Getting adequate physical activity is as essential as making changes in your diet. Children need at least 1 hour of moderate-~~to~~ vigorous physical activity every day, while adults should opt for ~~150 minutes~~one and half hours of cardiovascular activity per week.

Making small changes in your diet and increasing cardiovascular exercise each week can prove very beneficial in reducing cholesterol, inflammation and insulin resistance. Always be sure to discuss the best course of treatment with your healthcare provider. ~~to find the best course of treatment for you.~~

References:

~~Cholesterol. Medline plus.gov~~

~~Pediatric Primary Care. C. Burns. 6th edition~~

~~Functional medicine: Cholesterol. IFM.org~~

Commented [AF17]: Webpage addresses and/or full citation needed.