

Possible TMJ Related Symptoms

Headaches
Popping sounds
Pain chewing

Shoulder problems

High blood pressure

Restricted motion in the arms and legs



Vision changes
Hearing changes
Tinnitus
Ringing sounds
Balance problems

Stiff neck

Tripping over your feet

Areas That Can Cause Abnormal TMJ Muscle Function

Premature contact between teeth

Jaw muscle problems

Clenching
Grinding of the teeth

Dropping of the arch



Unlevel head

Chewing on one side

Neck injury

Pelvic imbalance

Tailbone problems

Cholesterol

If you listen to the television ads and read magazine advertisements, you would think that cholesterol is one of the worst substances in the world. However, cholesterol is essential in our bodies.

Cholesterol is essential to make steroid hormones, bile to digest fats, and vitamin D. It is also important as it makes up the insulation around our nerves and is involved in the maintenance of many membranes in our body. The problem is when we have too much cholesterol and especially the bad forms of cholesterol.

Let's first discuss one of the positive uses of cholesterol in the body. The adrenal cortex makes the majority of the steroid hormones in our body. Other sources of these hormones are the ovaries and testes. Cholesterol is the raw ingredient that these steroid hormones are made from. There are many cofactors, vitamins, which are involved in the transformation of cholesterol into these hormones. Cholesterol is transformed in two steps to the hormone progesterone in both males and females. The essential nutrient for this to occur here is niacin or niacinamide, a portion of the B complex.

From progesterone, our bodies then produce the sex hormones testosterone and estrogen and other hormones like DHEA, cortisol, and aldosterone. Consequently, if your cholesterol level is too low, then you can't produce these important hormones.

Let's start with how cholesterol is actually made in the body. The base chemical that cholesterol is derived from is called acetyl-CoA. This chemical is produced from a molecule known as pyruvate. The original source of this chemical is the breakdown of sugars and other carbohydrates in our diet. Another source is the metabolism of fatty acids.

If you over eat sugars and carbohydrates in your diet then you will produce abnormally high levels of pyruvate and fatty acids. These have many adverse side effects within the body. When we have more of the chemical acetyl CoA than we need for energy, the excess has to be dealt with through the production and usage of insulin. This causes an increased synthesis of fats triggering the production of triglycerides and cholesterol.

When we sleep at night we require little energy. Our body is at rest and the average person burns a little over 500 calories while we sleep. If you over eat sugars and carbohydrates at night, with your supper or in snacks afterwards, the result will be your body producing fats and increased cholesterol levels while you sleep. So one of the first steps in reducing high cholesterol levels is to reduce the amount of sugar foods and simple carbohydrates that you eat at night. The foods to reduce here include potatoes, rice, pasta, breads, carrots, peas, and excessive fruits. You can eat these foods at lunch because your activity level will burn them off in the afternoon and early evening.

There are a number of other lifestyle modifications that you can do to help control your cholesterol and triglyceride levels. One of the first is exercise. This exercise doesn't have to be overly taxing and can just consist of walking for a period of time. This physical activity will help to lower the bad cholesterol, LDL, and raise good cholesterol HDL. Brisk walking 5 days a week for 30 to 40 min. can produce positive results.

In a study of postmenopausal women, it was shown that those women who tested to have good heart and lung fitness were also those with good blood fat levels. Another study in men to determine if exercise had positive effects that were not related to the weight of the person was performed. This study showed that men of the same weight that were active had lower cholesterol levels than their sedentary counterparts. One surprising finding of this study was that your waist measurement is closely related to your triglyceride levels. Consequently, belly fat is related to triglyceride levels.

Obesity is on the rise in our children. In a study of the effects of exercise and diet, teenagers showed a positive response after 6 weeks of diet changes and daily exercise. The study also checked for changes in the walls of the arteries. The initial findings were that there were already, at this age, abnormal changes in the lining of the arteries that lead to plaque formation. These were beginning to be reversed at the 6-week retesting and were dramatically better in those children that continued the program for a year.

The results were not as good in those that stopped exercise and only followed the dietary changes.

Let's discuss some of the dietary changes that you can do to positively effect your blood fat levels.

As was mentioned above, the other source of cholesterol comes from saturated fat in the diet. You should think of substituting olive oil for butter in reducing and eliminating as many trans fats as possible. Trans fats are those that are found when the label says partially hydrogenated. You should also limit your intake of beef and pork and other animal fats and increase your intake of fish.

Speaking of fish, omega 3 oils are very important and have a very positive effect on cholesterol and triglyceride levels. One word of caution however, if you're on a blood thinner you have to be very careful about adding omega 3 capsules into your diet as it also will cause thinning of the blood. As usual, eating deep-water fish is better for you than taking supplements. But the supplements of omega-3 oils are a good way of spreading out the intake of these essential oils in your diet throughout the week. Other sources of omega-3 oils besides fish oils are flaxseed, walnuts, and sesame. The active ingredients in the fish are called EPA and DHA. Flaxseed, walnuts, and sesame do not contain these chemicals but contain the precursors for them. These precursors can be converted into these valuable oils but require cofactors, vitamins, to do so.

Other simple lifestyle modifications include quitting smoking, increasing your intake of nuts, especially walnuts and almonds, drinking green tea and moderate consumption of alcohol. The problem with alcohol is that higher levels of intake reverses the positive affects of raising HDL levels and leads to a decrease in HDL levels. As is usually the case, moderation is the key.

Most diets to control cholesterol level by

reducing cholesterol intake have proved ineffective. This is because the liver and other organs like the adrenals, the small intestines, and the reproductive organs produce cholesterol in our bodies. One of the substances produced by the liver from cholesterol is bile. Bile is necessary to digest fats. It is stored in the gallbladder and is slowly excreted all day long and increased release occurs when you eat fats.

Quaker Oats has advertised on television the importance of eating oatmeal for breakfast and it being heart healthy. Here is how that works. Oat fiber has an affinity for and attaches to fats. You eat your oatmeal with whole milk on it and the fat in the whole milk stimulates the release of a substance called CCK from the stomach that tells the gallbladder to release more bile. The bile, which contains cholesterol, is released in greater quantities into the intestinal tract where it meets the fiber in the oatmeal. The cholesterol then binds to the fiber and later you deposit this in the toilet bowl. The problem is that if you don't have a fat with the oatmeal there is only a little trickle of bile, cholesterol, which will be bound to the oat fiber and removed from your body.

Normally, the cholesterol in the bile is just reabsorbed into the blood stream. It goes round and round unless it binds to fiber.

The major dietary sources of cholesterol are animal fats. These obviously include dairy products like cheese, yogurts, ice cream, egg yolks, as well as beef, pork, poultry and surprisingly shrimp. Plants, in general, do not contain cholesterol except for a few nuts and seeds that contain substances called phytosterols.

Lipoproteins are the transport mechanism for cholesterol in our bloodstream. There are different types of lipoproteins. They are labeled according to their degree of density. The two important ones in relationship to cholesterol are LDL or low-density lipoprotein, and HDL or high-density lipoprotein. The LDL is the bad form and the HDL the good form. The LDL form is the one that is involved in the development of cardiovascular disease. The LDL is absorbed by one of the white blood cells in our

bloodstream. These can then become trapped in the walls of the blood vessels and slowly become transformed into plaque formation. This causes decreased blood flow in the heart, brain and the legs. HDL, on the other hand, has been shown to reduce the progression of atherosclerosis by bringing cholesterol back to the liver and the organs where it can be synthesized into bile or hormones.

Aside from these changes, there are supplements that can help balance your cholesterol levels. These include niacin, polycosanol and omega 3 oils. There has been a lot written about red rice yeast.

Red rice yeast is where the pharmaceutical companies developed the statin drug lovastatin. As the statin drug has side effects, so does the red rice yeast and it therefore is not one of the first supplements that you should use.

The statin medications have the following possible side effects. The main side effect is muscle pain but can include liver and kidney damage. Less severe are gastrointestinal symptoms like nausea, gas, diarrhea or constipation. Another possible side effect is an adverse effect on your glucose handling that could lead to diabetes. Finally, there has been a relationship between the statins and memory loss. These side effects are more likely if you are a female, are short, over 65, have any history of kidney or liver problems, are overweight or have or are starting to show signs of diabetes. Many of these side effects are due to a decrease in Coenzyme Q10 brought on by the statin intake.

Niacin is important in cholesterol regulation for two reasons. The first is that it allows cholesterol to begin its conversion into the steroid hormones. Second, niacin has been shown to increase good cholesterol, the HDL variety. One of the uncomfortable side effects of niacin is that it can cause a red flushing of the skin.

Polycosanol is a chemical found in sugar cane that can reduce the production of cholesterol in the liver, increases the breakdown of bad cholesterol, LDL, and also has been linked with

decreasing the stickiness of the cells in your blood stream thus helping to reduce the chance of blood clots.

What are the goals?

In a book titled **Predictive Medicine**, Emmanuel Cheraskin, M.D., D.M.D. outlined the results of experiments he did on thousands of individuals. He would examine people and plot out symptoms versus blood values. His conclusion was that there were no ranges but specific points where there were no symptoms. His finding was the best cholesterol level was 180. As far as the HDL level, you should aim to be at 60 plus. Values between 50 – 60 are good but results above 60 are better.

Applied kinesiology gives us options to aid in finding the treatment choices that are better for you. For example, the best nutritional support might be to aid in the production of the steroid hormones. Your history, symptoms, and findings of the applied kinesiology examination help to personalize your treatment for best results. This includes testing to see if you are susceptible for high homocysteine levels that were talked about last month. Remember, this is the chemical that causes the damage to the arteries that the bad cholesterol then invades causing the build up in the arteries.

Here are the basics:

Stop or dramatically reduce smoking
Increase your exercise level – aim for five 30 – 40 minutes of brisk walking a week as a minimum.

Reduce your intake of sugars and simple carbohydrates at your evening meal
Increase fish in your diet

Do not snack after your supper

Consider having oatmeal with a whole milk or another fat at breakfast

Increase fiber in your diet by increasing your intake of vegetables and fruits

Consider having nuts like walnuts or almonds for a snack

Aside from this, talk to us about the nutritional support that can help reduce your total levels and increase your good cholesterol levels.

[Cardiorespiratory fitness and cardiovascular disease risk factors in postmenopausal women.](#)

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[Cardiovascular disease risk factors in habitual exercisers, lean sedentary men and abdominally obese sedentary men.](#)

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Think skim milk and no fat milk products lack taste?

As published in the December 21, 2010 issue of *Annals of Internal Medicine*, scientists at the Harvard School of Public Health have identified a natural substance in dairy fat that may substantially reduce the risk of type 2 diabetes, by 60% and related metabolic changes. The compound trans-palmitoleic acid is a fatty acid found in milk, cheese, yogurt, and butter. Our bodies do not produce it, so the only source is from the diet. This study was conducted for 20 years.

Once again, the bottom line is moderation. Enjoy 2 ounces of cream or 8 ounces of yogurt or non skim milk a day.