

DR. CADE'S Approach

The following is excerpted from an interview held with Dr. Cade.

Q. Dr. Cade you say that there is a great deal of concern with cholesterol by the general population in this country, how did you approach the problem?

A. First of all, it is well known and accepted that there are a number of fibers that one can drink that will help lower cholesterol. By and large, they taste terrible and the drink that comes from mixing them is usually thick, sticky and unpalatable. There are a number of medications that one can take to reduce cholesterol, which can reduce the production of cholesterol by the liver, medications like Mevacor can then reduce overall cholesterol in the body. There are other medications that can do essentially the same thing. But virtually all medications have previously had side effects in some, not all, patients.

Q. Not to scare anyone, but what are some of these side effects?

A. Some of these effects can be lethal, some cause blindness, and almost all medications are unpredictable. They require constant monitoring by the physicians as to liver function, etc. The constant monitoring is expensive, as are the drugs themselves.



Q. How expensive are they?

A. A 40 mg tablet of one of the most popular ones is approximately \$4.00 per day and if they take two, it's obviously \$8.00 and so on. Almost all drugs are in that price range. The average person can't afford the high cost of trying to lower their cholesterol and I reasoned that while it is necessary for many patients to use this method, especially if they are in the high 280s and above there had to be a way to treat this in a non-Medical, non drug manner for others.

Q. What did you come up with?

A. Since I knew that soluble fibers had been shown to lower cholesterol, I looked around for some that could be made into a drink that could taste good and encourage people to use it. I found two fibers that appeared to fit the bill. Both had been used in the baking and soft drink industry for a number of years as stabilizers. The first was gum arabic, which is a naturally occurring soluble fiber that is harvested from a tree in the Mideast, the acacia tree. The second is a synthetic fiber called carboxymethylcellulose that is also a soluble fiber. Both of these fibers have the ability to absorb cholesterol in the intestines. I then designed drinks using both of these soluble fibers, as well as a placebo drink so that they would all look and taste the same to the subjects in order to conduct an experiment.

Q. How did you conduct your experiment?

A. First of all, you need to determine that the methodology uses the scientific approach so that you can substantiate whatever the results will be. Obviously, not all experiments end successfully and there can be surprises in your results. Results you didn't consider.

Secondly, I chose 24 subjects with high cholesterol and did a baseline on them for 4 weeks. By measuring their cholesterol each week and comparing the information, we were able to arrive at their "baseline". The drinks were then made and given to each subject for 8 weeks. One-third received the placebo, one-third the gum arabic drink, and one-third the carboxymethylcellulose drink. The subjects did not know which one they were receiving. We then monitored them for liver function, blood pressure, eyes, cholesterol levels, triglycerides, etc. closely monitoring for any side effects. We switched them at the end of 8 weeks and then again 8 weeks later.

Each subject, then, received all three drinks and we had results from all subjects on all of the drinks.

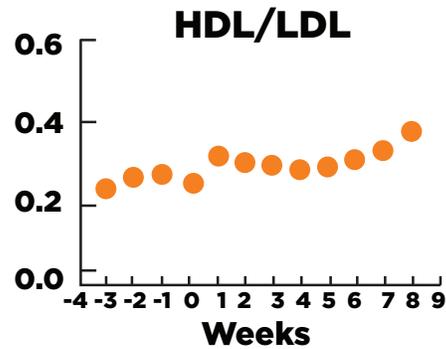
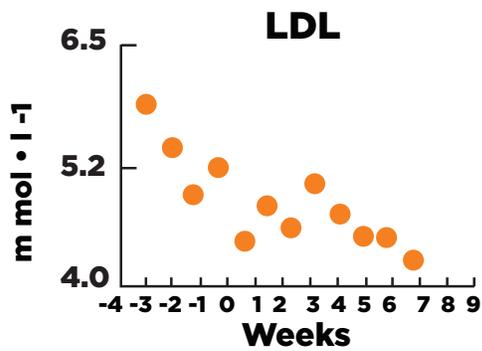
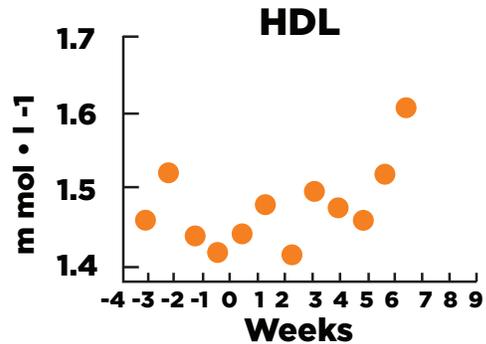
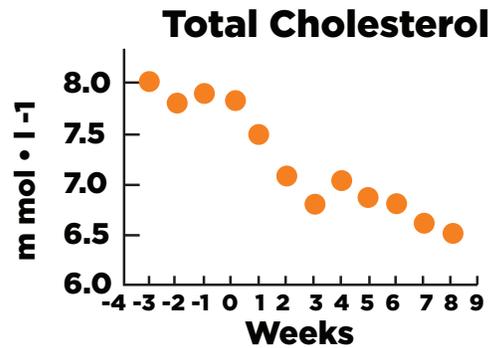
Q. What were the results?

A. First of all, there were no side effects from any of the drinks. The blood tests were sent to the lab and the results were; the Placebo drink showed no changes at all, while both of the soluble fiber drinks showed drops in cholesterol (See tables below). The gum arabic drink showed the most improvement with 16% total drop vs 7% with the carboxymethylcellulose drink. In addition, we received some welcome surprises. HDL (good cholesterol) went up with the gum arabic drink and even more surprisingly triglycerides fell markedly while there was no change on the carboxy drink.

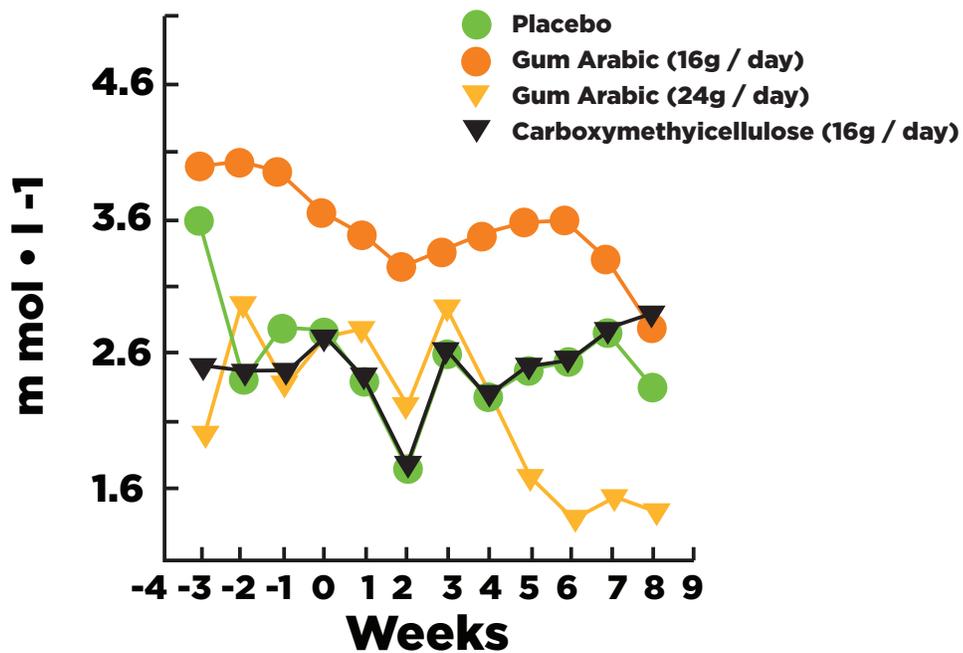
Our conclusions were that both soluble fiber drinks would absorb the bile acids from the liver and cholesterol from the diet in the intestinal tract. It's important to note that only a small amount of the cholesterol you eat makes it into the bloodstream (less than 20%) the rest is manufactured by the liver. So, if you find a way to reduce the cholesterol in the intestinal track by absorbing it, you decrease the amount from both sources that the bacteria in the intestines can digest. You then, in fact, lower overall cholesterol in the body. Obviously, we picked the one with the best results, gum Arabic, as the basis for Cholesterade.



GUM ARABIC (24g / day)



SERUM TRIGLYCERIDE CHANGES DURING SOLUBLE FIBER ADMINISTRATION



Q. What else did you find?

A. Other than some flatulence increase in some subjects, there were no side effects, All subjects said they would take it again. In addition, we experimented with a number of flavors and it worked well with all of them: orange is the most popular flavor, but grape and Kiwi Tangerine are great also. The flavors were so good that even my grandchildren drank it from the jug I mixed in my refrigerator.

Q. So this is a powder?

A. Yes, you can mix-up a gallon at a time or make it by the glass.

Q. How many glasses a day?

A. You drink four glasses per day. This is with each meal and before bedtime. By drinking it with your meals, you then allow the absorption of the cholesterol in the intestines at that time. You also get those needed glasses of water each day too.

Q. Could someone use this for other than cholesterol? I'm thinking that if it doesn't taste like fiber and it tastes as you say, it could be a great source of fiber for anyone.

A. That's right, the fiber in a glass is approximately 6.4g. Four per day gives you 25.6. The recommendation is between 25-30 g. per day for individuals. Obviously, you get the fiber from a variety of other sources, so with a couple of glasses you probably put most people over the top.

Q. But did you personally come out?

A. My cholesterol was very high. I measured 314. Because it was that high, I took medication to get it down to 245 after 8 weeks. I then went on the Cholesterade drink and took it to the 190-200 range, which is within normal limits. As long as I take the drink I can stay there - and I do!

Q. So how would you recommend others to take it? The same way?

A. I recommend anyone to consult their personal physician and determine where they are. If they are below 250, they can use the drink and be close to normal limits without medication. If they are above it, they and their physician will probably use a combination like I did personally.

