

Family Medicine Clerkship Plain Language Summary Template

Title: Niacin

Name: Andrew J. Bryan

Plain Language Summary:

Niacin is one of the “B” vitamins in the B-complex of vitamins that you take in when you eat a healthy-balanced diet. Interestingly, larger doses of niacin have been a popular treatment for low HDL (good cholesterol) and high triglycerides (bad fats in your blood). In fact, niacin has been a popular supplement for patients since the positive effects were seen in the 1950’s. Recently, investigators have looked at niacin more carefully because in the United States alone, we are spending a tremendous amount of money on this supplement, 800 million dollars per year in fact. The investigations have taught us many things about niacin, revealing that it does have the effects we thought it would on the cholesterol and fats in your blood. Surprisingly, it didn’t seem to prevent the diseases we thought it might and this has created turmoil in the primary care clinics across our country and the world.

To understand the importance of cholesterol, we must journey through time to a small research lab below a public sports stadium at the University of Minnesota run by Ancel Keys, a prominent researcher in the treatment’s doctor’s now provide to protect the heart. He discovered that if you had high HDL (the good cholesterol) and low triglycerides you were less likely to have a heart attack, stroke or hardened arteries. People began to imagine HDL as “small scrubbing brushes” for the arteries to keep them clean. So now, with the finding of niacin helping increase the “brushes” that should clean the arteries however at the same time failing to protect one from the diseases of heart attack, stroke and hardened arteries it has put some of our historical practices in question.

The human body is complex and we are continually trying to improve our understanding of niacin and its effects on our system. If niacin therapy came with no risk to our bodies, there would be less of an issue however this is not the case. As with any medication, niacin comes with many risks and potentially serious side effects. Skin flushing, a condition where your skin can become red and itchy, as well as elevated blood sugars and stomach upset can all occur with niacin. For these reasons and due to the current evidence, we would like all our patient’s who are currently taking a statin drug as well as niacin to ask their doctor’s about the benefits vs. risks that are currently understood in their case for continuing vs. stopping the medication supplement. We hope this helps you understand the current situation and we hope you have a nice day.

The Heart Clinic
Andrew J Bryan MS4

Additional Resources:

National Cholesterol Education Program
<http://www.nhlbi.nih.gov/about/ncep/>

American Heart Association
www.heart.org

American Medical Association
www.ama-assn.org/

Key Words:

Niacin
Myocardial Infarction (Heart Attack)
Cholesterol
Atherosclerosis
Stroke

This document was created by a medical student enrolled in the Family Medicine Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up-to-date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.