Taking Statins Without Concrete Evidence?

By Robert Ferguson

Robert's Note: Before you read this article, I encourage you to have an open mind and consider sharing this information with your doctor. Many people take statins based on incomplete information. The goal of this article is not to make you feel regretful or misled but to empower you with knowledge so you can make informed decisions about your health.

For decades, statins have been the cornerstone of medical strategies aimed at lowering lowdensity lipoprotein (LDL) cholesterol, commonly labeled as "bad" cholesterol. However, as their use has become widespread, questions have emerged regarding the actual health benefits of reducing LDL levels. Notably, some studies have suggested that lower LDL levels may be associated with increased mortality, challenging the conventional wisdom surrounding cholesterol management.

The Birth of Statins

The development of statins began in the 1970s with the discovery of mevastatin by Japanese biochemist Akira Endo. This compound inhibited cholesterol production in the liver, leading to the creation of lovastatin, the first statin approved by the FDA in 1987 under the brand name Mevacor, developed by Merck.

At that time, the lipid hypothesis—popularized by Ancel Keys—suggested a direct link between dietary fat, cholesterol, and heart disease. This theory led to the widespread acceptance of cholesterol-lowering medications as a preventive measure against cardiovascular disease.

The Rise of the Statin Empire

Throughout the 1990s and 2000s, statins such as Lipitor, Zocor, and Crestor became household names. Pharmaceutical companies invested heavily in marketing campaigns emphasizing the dangers of high cholesterol and promoting statins as a simple solution. By the early 2000s, Lipitor alone was generating over \$12 billion annually, making it one of the best-selling drugs of all time.

Medical guidelines began recommending statins for broader populations, including individuals with no history of heart disease but with elevated cholesterol levels. This expansion was influenced by expert panels, some with ties to the pharmaceutical industry, advocating for preventive statin use.

The LDL Cholesterol Debate

Despite the widespread use of statins, evidence supporting the notion that lowering LDL cholesterol improves overall health outcomes is not definitive. While statins effectively reduce LDL levels, their impact on all-cause mortality and quality of life remains uncertain.

A growing body of research suggests that high LDL cholesterol alone may not be the primary culprit in heart disease. Factors such as inflammation, insulin resistance, and oxidative stress have been identified as significant contributors to cardiovascular health. Some researchers argue that the modest benefits of statins may be due to their anti-inflammatory properties rather than their cholesterol-lowering effects.

Insights from the Framingham Heart Study

The **Framingham Heart Study**, a long-term, ongoing cardiovascular study, has provided valuable insights into the relationship between cholesterol levels and health outcomes. Notably, data from this study indicated that while lower LDL cholesterol levels were associated with a reduced incidence of coronary heart disease, there was a statistically significant increase in deaths from non-coronary causes among individuals with lower LDL levels. This finding suggests a more complex relationship between cholesterol levels and overall mortality than previously understood.

However, it's essential to recognize that the original Framingham study **grouped all LDL cholesterol together**, without distinguishing between **small**, **dense LDL (VLDL)**—which is more likely to contribute to atherosclerosis—and **larger**, **less harmful LDL particles**. This lack of differentiation is crucial, as modern research has shown that small, dense LDL is far more atherogenic than larger LDL particles. This oversight may have influenced the study's conclusions and the subsequent widespread emphasis on lowering LDL cholesterol as a primary preventive measure.

Absolute vs. Relative Risk Reduction: The Statin Paradox

A critical aspect often overlooked in discussions about statins is the difference between relative risk reduction (RRR) and absolute risk reduction (ARR). Pharmaceutical companies frequently highlight RRR in their marketing, which can be misleading without proper context.

For example, a study might claim that statins reduce the risk of heart attack by 30%, representing the RRR. However, if the actual risk of a heart attack in the untreated group is only 2%, reducing it by 30% brings the risk down to 1.4%, resulting in an ARR of just 0.6%. This means that out of 100 people, fewer than one additional person would avoid a heart attack by taking the statin, while the remaining 99 would gain no benefit but still face potential side effects. This discrepancy can lead patients to overestimate the benefits of statins.

LDL Cholesterol vs. Arachidonic Acid: Which Biomarker Matters More?

While LDL cholesterol has long been the focal point in assessing cardiovascular risk, emerging evidence suggests that **arachidonic acid (AA)** levels may be a more accurate and reliable biomarker for overall health risk.

AA, an omega-6 fatty acid, plays a critical role in the body's inflammatory processes. Elevated levels of AA, particularly when out of balance with omega-3 fatty acids, are associated with chronic inflammation—a key driver of heart disease, metabolic syndrome, and other chronic illnesses. Monitoring the AA/EPA ratio (the balance between AA and eicosapentaenoic acid, an

omega-3) provides insight into the body's inflammatory state, which many experts believe is a more meaningful predictor of cardiovascular risk than LDL cholesterol alone.

Unlike LDL cholesterol, which can be influenced by short-term factors such as diet and stress, AA levels reflect long-term dietary patterns and cellular health. This makes AA a more stable and insightful marker when evaluating inflammation, oxidative stress, and overall metabolic health.

The Side Effects and Risks

As statin prescriptions have increased, so too have reports of side effects. Patients frequently report muscle pain, fatigue, cognitive issues, and an increased risk of type 2 diabetes. These side effects, combined with the lack of definitive evidence supporting LDL reduction, have led many to question whether the benefits of statins outweigh the risks—especially when viewed through the lens of absolute risk reduction.

A Call for Re-Evaluation

In recent years, a growing number of healthcare professionals have called for a re-evaluation of the cholesterol-centric approach to heart disease prevention. They advocate for a more comprehensive strategy that focuses on reducing inflammation, improving insulin sensitivity, and addressing lifestyle factors such as diet, exercise, and stress management.

Testing for AA levels and ensuring a balanced omega-6 to omega-3 ratio offers a promising alternative to the traditional cholesterol paradigm. This shift could lead to more personalized and effective strategies for reducing cardiovascular risk and improving overall health.

Moving Forward

The debate over statins and LDL cholesterol is far from settled, but one thing is clear: health is more complex than a single blood marker. As patients and practitioners seek better solutions, the focus must shift from merely lowering cholesterol to truly improving overall health and well-being.

Understanding the difference between relative and absolute risk reduction, along with evaluating biomarkers like arachidonic acid, is essential for making informed decisions about statins and other medications. Landmark studies like Framingham serve as a reminder that the answers to better health are rarely simple—and often lie beyond the numbers we've been trained to watch.

References

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Robert Ferguson is a California- and Florida-based single father of two daughters, nutritionist, researcher, best-selling author, speaker, podcast and television host, health advisor, NAACP Image Award Nominee, creator of the Diet Free Life methodology, Chief Nutrition Officer for iCoura Health, and he serves on the Presidential Task Force on Obesity for the National Medical Association. You can e-mail Robert at <u>robert@dietfreelife.com</u>