Should we lower cholesterol as much as possible?

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BACKGROUND FROM DAN MURPHY:

Metabolism At A Glance

By J. G. Salway Blackwell Publishing 2004

Step #1 Acetyl-CoA (from glucose metabolism)

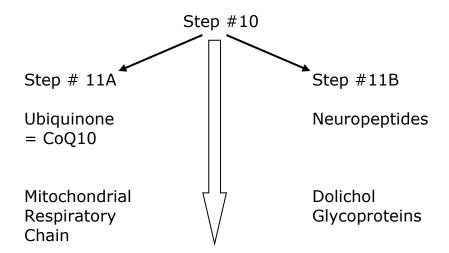
Step #3

Hydroxy Methyl Glutaric Acid CoA (HMG CoA)

HMG CoA Reductase

Inhibited By Statin Drugs

Step #4 Mevalonic Acid



Step #32 Cholesterol

KEY POINTS FROM THIS ARTICLE:

- 1) "Statins are portrayed as harmless drugs that almost everyone would benefit from, but little is known about the side effects at the high doses now being suggested."
- 2) The American National Cholesterol Education Program new recommendations for lowering cholesterol would "put most of the Western world's adult population on statin therapy." However, the risk to benefit ratio for a more drastic lowering of low-density lipoprotein cholesterol is unknown and these authors question the wisdom of this advice.
- 3) People at elevated cardiovascular risk would have to take higher statin doses that "would increase the risk of adverse side effects." "Clinical experience has taught us that a dose increase of that size of any drug will inevitably increase both the number and the seriousness of side effects."
- 4) A study evaluating aggressive lipid lowering with high-dose statins did not show a reduction of deaths, but the "number of adverse effects were far higher than in any previous statin trial. Almost 90% of participants had side effects, and in almost half of them they were recorded as serious."
- 5) Known adverse effects of statins include:
- A)) Heart failure

"All statins inhibit the synthesis of hydroxymethylglutaryl [HMG] coenzyme A reductase, an enzyme involved in synthesis of the precursor of cholesterol and other important molecules such as coenzyme Q10, vital for mitochondrial energy production. Statins lower plasma CoQ10 concentrations and worsen cardiac function in patients with heart failure, and oral coenzyme Q10 can improve or prevent this serious complication."

B)) Myalgia and rhabdomyolysis

Muscle complaints may occur in as many as 73% of statin takers.

"In rare cases, myopathy has led to rhabdomyolysis and death from renal failure."

C)) Mental and neurological symptoms

"Cholesterol is vital for the development and function of the brain. It is therefore unsurprising that reduced concentrations may produce mental and neurological complaints such as severe irritability, aggressive behaviour, suicidal impulses, cognitive impairment, memory loss, global amnesia, polyneuropathy, and erectile dysfunction."

"None of these side effects are mentioned on the product labels or information inserts for statins."

D)) Cancer

"At least five animal experiments have found that the statins are carcinogenic in amounts that produce blood concentrations similar to those achieved by doses commonly administered to patients."

"Numerous cohort studies have found low cholesterol to be a risk factor for cancer."

"No increase of cancer was seen in a 10 year follow-up of participants in the Scandinavian simvastatin survival study, and the authors therefore concluded that 10 years of statin treatment does not induce cancer. Neither does 10 years' smoking tobacco."

In "the only statin trial exclusively in elderly people, the significant increase in cancer mortality neutralized the benefit from fewer cardiovascular deaths."

SUMMARY POINTS FROM AUTHOR:

- 1) "US recommendations for low density lipoprotein cholesterol concentrations could put most of the Western world's adult population on statins."
- 2) "Doses of statins would have to be more than eight times higher than currently used. Increasing the dose of [statins] by eight times does not lower total mortality."
- 3) "Adverse side effects [from statins] in clinical trials are under-reported."
- 4) "Any reduction in non-fatal events [from taking statins] may be outweighed by more numerous and more severe adverse effects [from taking these drugs].