

Cholesterol Lowering Pills – How Effective? Compared with What?

David K. Cundiff, MD
LA County + USC Medical Center
Internal Medicine Dept.
Retired

Recommended Diets for Cholesterol Lowering Drug Trials

- American Heart Association (AHA) Diets
 - Step 1 diet
 - saturated fat: < 10%
 - total fat: < 30%
 - Step 2 diet
 - saturated fat: < 7%
 - total fat: < 30%
- National Institute for Health and Clinical Excellence (NICE in UK) diet:
 - < 10% saturated fat and total fat < 35%

Recommended Diets Not Effective

Comparing AHA, NICE, or similar diets with regular diets

- a meta-analysis of 27 studies (30,902 person years of observation)
 - no significant difference in morbidity or mortality.
 - no significant difference in morbidity or mortality due to vascular disease
- Positive results of lipid lowering drug trials depend on excess deaths due to these ineffective AHA, NICE, and other “low fat” diets

Plant-based Diet Alternatives

Studies consistently confirm that plant-based diets are evidence-based to lower LDL cholesterol and reduce CAD deaths and complications.

Portfolio Diet

- A diet high in plant sterols, soy protein, viscous fibers, and almonds lowered LDL cholesterol by 29% compared with 31% for lovastatin with a AHA type diet ($P = \text{NS}$).

Jenkins DJA, et al. Effects of a Dietary Portfolio of Cholesterol-Lowering Foods vs Lovastatin on Serum Lipids and C-Reactive Protein. *JAMA*. 2003;290:502-510

“Lifestyle Heart Trial”

Dean Ornish, MD

- Standard CAD rehabilitation including AHA diet versus aggressive CAD risk factor reduction
 - smoking cessation
 - 10% fat vegetarian diet
 - moderate aerobic exercise
 - hatha yoga exercises
 - Meditation
 - a support group
- 3 months: 91% reduction in angina
- 4 years: intervention group had only one half of the cardiac events

Ornish D, et al. *Lancet*. 1990;336(8708):129-133.

Statins and Cancer

- Statins cause cancer in animals
- Do statins cause cancer in humans?
- Meta-analyses of trials: no increase in cancers
- Pravastatin trial (age 70 – 82, n= 5,804): 28% more cancer deaths ($P = 0.08$)
- However, follow-up < 5 years
- Carcinogens (eg, tobacco) typically take >20 years to cause cancer
- RCTs lasting > 20 years not anticipated
- Observational studies not ongoing

Conclusion

Insurance coverage for evidence-based lifestyle change programs instead of lipid-lowering medications would improve health of hyperlipidemic people and save money.