

FROM THE ACLM  
**PRESIDENT'S DESK**

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## Lifestyle Medicine: Making the Choices Clear?

**Abstract:** *Patients are often not aware of the reversibility of chronic lifestyle-related diseases and most physicians are not telling them. The present practice of communicating treatment effectiveness with relative risk reductions does not allow clinicians or patients to evaluate the relative effectiveness of our technotherapies or lifestyle interventions. Clinicians should use the clarity of “number needed to treat,” “number needed to harm,” and absolute risk in communicating with patients about all available therapies and then empower the patient to make the choices that fit their needs best.*

**Keywords:** reversibility; lifestyle change; responsibility; number needed to treat (NNT); number need to harm (NNH)



Western medicine has come a long way in solving acute health dilemmas. It is almost to the place where we can “put Humpty-Dumpty back together again.” Diagnostic and therapeutic technologies allow us to see and understand ever more of the intricacies of cell biology and physiology. We now have the abilities to perform apparent miracles with minimally invasive technologies with promise of more to come.

Over the past 60+ years, Americans have come to trust scientific technology to solve most all our illness problems. While this appears to be a valid and reasonable expectation for acute medical problems, it has been less than satisfactory for chronic, noninfectious diseases. Unfortunately, we still have a growing and apparently overwhelming problem with chronic killer diseases like heart disease, diabetes, hypertension, obesity, and many cancers.

The bad news is that our technologies have not completely solved these problems. While we may be able to

found that statins reduced all-cause mortality by 16% in the healthy population. In this group, 2.8% died over the study period. Sixteen percent of the 2.8% would be an absolute reduction of 0.45% and would give a “number needed to treat” (NNT) of 222, which means one would have to treat 222 individuals to save 1 life. This is not a very encouraging number.

This is but a single pertinent illustration but is exemplary of the problems with depending on technology alone to solve a lifestyle related chronic disease process. The good news is that healing can occur

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temporize and ameliorate ischemic heart disease symptoms with angioplasties and stents, we have not been able to clearly demonstrate that they actually add years to life. The commonly heard farewell message of postprocedure discharge, “we fixed your left main descending artery” is often a less than honest reassurance.<sup>1</sup> Reaching target lipid levels with our pharmacologic technology does not really protect against cardiac events. When data from 8 trials were combined in a Cochrane review,<sup>2</sup> the researchers

when the underlying cause is addressed primarily. While one should reasonably argue that trial design, “randomization,” and participant selection are significantly different, the power (effect size) of a strict, whole-plant-based diet to prevent heart disease is illustrated in the experience reported by Caldwell Esselstyne’s intervention, which shows the NNT is closer to 2—(absolute reduction of 50%) in a moderate-sized compliant population.<sup>3</sup> While it is clear that there is more to be learned as to the

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most effective lifestyle treatment plan, it is good news that heart disease can be reversed. People in crisis need to know this. Someone should tell them . . . But who?

In the late 1990s, I had the privilege to attend the American Diabetes Association Consensus Conference on metabolic syndrome at a downtown Los Angeles hotel. The first half-day block nailed down clearly that a fasting insulin level was not able to accurately make the metabolic syndrome diagnosis as there were too many false negatives. The consensus was that the clinical picture of 3-out-of-5 clinical markers that is now in use was the preferred method.

The second day was on a variety of other diabetes-related topics. During the mid-morning break, I discovered the chair of the conference unoccupied amid the attendees outside the meeting room and approached him with a concern. I knew that the ADA (American Diabetes Association) diet at that time had not been demonstrated to in any way stop the process yet there was information coming out of Pritikin's program in Santa Monica, California, that all the parameters of the metabolic syndrome were reversing with a plant-based diet. R.J. Barnard of UCLA had been reporting reversing of lipid parameters,<sup>4</sup> and glucose control measures<sup>5</sup> on program participants for over 10 years.<sup>6</sup> So I asked the chair, "Why does the ADA promote a diet demonstrated to continued worsening of the disease parameters while there is clear evidence in the literature that a whole-plant-based diet will improve?" His answer caught me by surprise, "Oh, I know. But no one would do it." The answer did not seem either reasonable or fair and I excused myself from the conversation with little more than a stammer.

I have thought much about this answer. I have heard it from others since. It seems so paternalistic. Of course, no one will do it if they don't know about it. But it only seems fair that people need to know what is possible. People should

have a choice. We have a responsibility to tell them what the science reveals and then they can decide for themselves whether to make the necessary lifestyle changes. Who is going to tell them?

A clinician's own lifestyle practices can have a significant impact on their instructions to a patient.<sup>7</sup> But, a professional physician should not let his or her own personal behavioral limitations and biases limit the available treatment options for patients who have potentially reversible disease. This is unethical and far too common.

As I walked away from my discussion and the conference crowd I felt frustrated. I made my way to the far side of the lobby area and away from the crowd. There was seated a gentleman with the same style of nametag and meeting folder that I had. I tentatively expressed my emotion-driven thoughts with him. I shared that even with all the evidence of the effectiveness of lifestyle change, the scientific community seemed much more interested in finding an explanatory gene or some miracle biochemical fix for type 2 diabetes. The majority still expected a technology fix without addressing the underlying causative behaviors of inactivity and excessive caloric intake. He was a good listener, nodding a little now and then and not interrupting.

The mostly one-sided conversation wound to an end as the beginning of the next meeting was announced and I headed off to the restroom. As I entered the meeting hall I was surprised to see that my conversation "partner" was the next speaker and, what's more, he was addressing the genetics of type 2 diabetes. He eruditely and clearly laid out the case that there is no gene to explain diabetes, giving an implicit nod to the importance of dealing with the underlying physiology. I happened to sit with the speaker in the van on the way to the airport later that day. I expressed my pleasant surprise to him stating, "You agreed with me." "Yes," he said, and followed with a pleasant interchange of related perspectives. I was encouraged that there are some who understand the

underlying issues in chronic lifestyle-related disease management.

To be fair, the ADA has since recognized that there are other reasonable and effective diet options for the effective management of diabetes. The ADA diet of the late 1990s has morphed into a more effective plan. The results of studies exploring 100% plant-based options have been presented at the scientific meeting and are "allowed" as reasonable options in current ADA guidelines.

But the practical clinical problem remains. While progress is being made in understanding the details and efficiency of the reversibility of chronic disease, the frontline of diabetes treatment from clinic to dietician is still not, as a general rule, letting people know of the reversal potential. It is not clear to the patient with type 2 diabetes or heart disease that the effectiveness of the best lifestyle treatments is significantly greater than that of pills and many other technologies.

So who is going to tell them? Dr Google? The chiropractors and naturopaths? No, we as clinicians should be the ones. Physicians still have the respect of most North Americans. That credibility carries with it the responsibility to effectively communicate the truth and translate it into action.

Patients have a right to know of the lifestyle dimensions of their disease as well as the effectiveness of our medical technologies. The scientific community and individual clinicians have a responsibility to tell them in simple and understandable terms what we know of the disease pathophysiology as well as the NNT and "number needed to harm" (NNH) for each therapy whether a pharmacologic technology, a procedure, or a lifestyle change. Then an informed, realistic hope can arise as a motivator, rational choices can be made, and the individual can become responsible for performing his or her primary role in treating the lifestyle-related disease. They will then be able to rationally adopt the treatment technologies and

corresponding risks with which they are personally comfortable.

### Declaration of Conflicting Interests

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### References

1. Levine GN, Bates ER, Blankenship JC, et al. 2011 ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention. A report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines and the Society for Cardiovascular Angiography and Interventions. *J Am Coll Cardiol*. 2011;58:e44-e122. doi:10.1016/j.jacc.2011.08.007.
2. Taylor F, Ward K, Moore THM, et al. Statins for primary prevention of cardiovascular disease. *Cochrane Database Syst Rev*. 2011;(1):CD004816.
3. Esselstyn CB Jr, Gendy G, Doyle J, Golubic M, Roizen MF. A way to reverse CAD? *J Fam Pract*. 2014;63:356-364b.
4. Barnard RJ. Effects of life-style modification on serum lipids. *Arch Intern Med*. 1991;151:1389-1394.
5. Barnard RJ, Jung T, Inkeles SB. Diet and exercise in the treatment of NIDDM. The need for early emphasis. *Diabetes Care*. 1994;17:1469-1472.
6. Barnard RJ. Research at the Pritikin Longevity Center. *Appl Physiol*. 1985;13:8-13.
7. Frank E. Physician health and patient care. *JAMA*. 2004;291:637.