



[The Conventional Wisdom on Cholesterol Is Full of Holes](#)

I've argued against the conventional wisdom on cholesterol many times on this site. The conventional wisdom on cholesterol is full of holes.

Questions on atherosclerosis

Someone who believes in the conventional wisdom, namely that cholesterol clogs arteries, pointed me to an article called [Twenty questions on atherosclerosis](#), by William C. Roberts, M.D. Roberts is the Executive Director of the Baylor Heart and Vascular Institute, and the Editor-in-Chief, *The American Journal of Cardiology* and *Baylor University Medical Center Proceedings*. In other words, a cardiologist's cardiologist. He writes:

Is atherosclerosis a disease affecting all animals or only certain animals?

Atherosclerosis affects only herbivores. Dogs, cats, tigers, and lions can be saturated with fat and cholesterol, and atherosclerotic plaques do not develop.

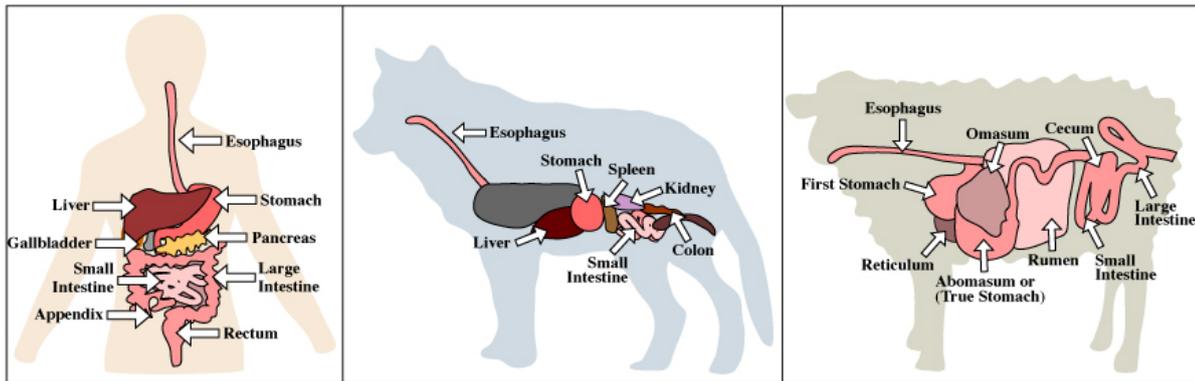
I was easily able to find that ["Dogs with atherosclerosis were over 53 times more likely to have concurrent diabetes mellitus than dogs without atherosclerosis"](#). Diabetes increases the risk of atherosclerosis greatly, 53 times more in dogs. So, not only do dogs get atherosclerosis, against what Dr. Roberts says, when they do it appears to have nothing to do with cholesterol.

Are human beings herbivores, carnivores, or omnivores?

Although most of us conduct our lives as omnivores, in that we eat flesh as well as vegetables and fruits, human beings have characteristics of herbivores, not carnivores (2). The appendages of carnivores are claws; those of herbivores are hands or hooves. The teeth of carnivores are sharp; those of herbivores are mainly flat (for grinding). The intestinal tract of carnivores is short (3 times body length); that of herbivores, long (12 times body length). Body cooling of carnivores is done by panting; herbivores, by sweating. Carnivores drink fluids by lapping; herbivores, by sipping. Carnivores produce their own vitamin C, whereas herbivores obtain it from their diet. Thus, humans have characteristics of herbivores, not carnivores.

There's a lot to unpack there, so I'll just leave the following chart:

THE HERBIVORE VS. OMNIVORE COMPARISON CHART



Teeth:	MAN	WOLF	SHEEP
incisors:	both jaws	both jaws	lower jaw only
molars:	ridged	ridged	flat
canines:	small	large	absent
Jaw:	MAN	WOLF	SHEEP
movements:	vertical	vertical	rotary
function:	tear & crush	tear & crush	grinding
mastication:	unimportant	unimportant	vital function
rumination:	never	never	vital function
Stomach:	MAN	WOLF	SHEEP
capacity:	4 pints	4 pints	8 1/2 gallons
emptying time:	3 hours	3 hours	never empties
interdigestive rest:	yes	yes	no
bacteria present:	no	no	yes - vital
protozoa present:	no	no	yes - vital
gastric acidity:	strong	strong	weak
cellulose digestion:	none	none	70% - vital
digestive activity:	weak	weak	vital function
Colon & Caecum:	MAN	WOLF	SHEEP
size of colon	Short/small	Short/small	Long
caecum size:	tiny	tiny	Long
function of caecum :	none	none	vital function
appendix:	vestigial	absent	Caecum
rectum:	small	small	capacious
digestive activity:	none	none	vital function
cellulose digestion :	none	none	30% - vital
bacterial flora:	putrefactive	putrefactive	fermentative
food absorbed:	none	none	vital function
volume of faeces:	small/firm	small/firm	voluminous
gross food in faeces:	rare	rare	large amount
Gaul Bladder:	MAN	WOLF	SHEEP
size:	well-developed	well-developed	often absent
function:	strong	strong	weak/absent
Digestive Activity:	MAN	WOLF	SHEEP
from pancreas:	solely	solely	partial
from bacteria:	none	none	partial
from protozoa:	none	none	partial
overall efficiency:	100%	100%	50% or less
Feeding Habits	MAN	WOLF	SHEEP
frequency:	intermittent	intermittent	continuous
Survival without:	MAN	WOLF	SHEEP
stomach colon & caecum:	possible	possible	impossible
microorganisms:	possible	possible	impossible
plant foods:	possible	possible	impossible
animal protein:	impossible	impossible	possible
Ratio of Body Length to:	MAN	WOLF	SHEEP
entire digestive tract/small intestine:	1:5 1:4	1:7 1:6	1:27 1:25
Huge difference!			4 times Longer!
As you can clearly see the science tells the story of what we should be eating!			
Special Thanks to Dr. Barry Groves PhD: http://www.second-opinions.co.uk/carn_herb_comparison4.html			

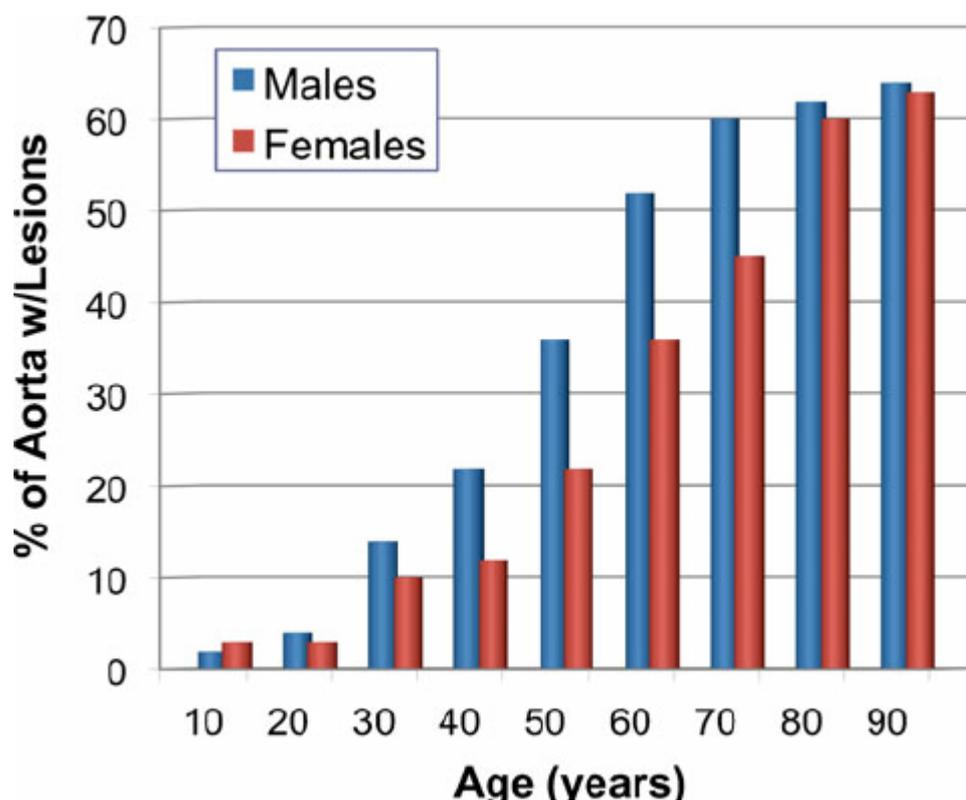
Humans look far more like carnivores than herbivores.

Update: Several people have pointed me to the above chart at various times, which was compiled from [a series of articles by the late Barry Groves](#). That said, I don't know who actually made the chart. So, as additional support for the idea that humans are not natural vegetarians, see this article, [How Humans Became Meat Eaters](#).

Is atherosclerosis a consequence of aging and therefore a degenerative disease?

No...

Another chart ([source](#)), which shows that age is a major, perhaps the major, risk for atherosclerosis:



What risk factors predispose to atherosclerosis?

Risk factors include hypercholesterolemia, systemic hypertension, diabetes mellitus, obesity, low HDL cholesterol, cigarette smoking, and inactivity.

This is perhaps the most interesting of Roberts' answers. He listed 7 risk factors, and only one of them is high cholesterol. If high cholesterol causes atherosclerosis, how can diabetes or hypertension or smoking be risk factors? They have nothing to do with cholesterol and show that cholesterol either

doesn't cause atherosclerosis or is a relatively unimportant factor.

Of the various atherosclerotic risk factors, which one is an absolute prerequisite for development of atherosclerosis?

The answer is hypercholesterolemia. What level of total cholesterol and specifically LDL cholesterol is required for atherosclerotic plaques to develop? Symptomatic and fatal atherosclerosis is extremely uncommon in societies where serum total cholesterol levels are <150 mg/dL and serum LDL cholesterol levels are <100 mg/dL

As I wrote about [here](#), the typical heart attack patient has a normal cholesterol level, but is glucose intolerant. So high cholesterol isn't required for atherosclerosis, but glucose intolerance may be.

What evidence connects atherosclerosis to cholesterol?

The connection between cholesterol and atherosclerosis is strong.

He says herbivores get atherosclerosis when fed cholesterol. Humans aren't herbivores, who don't normally consume cholesterol, since it's not found in plant foods.

He says atherosclerosis increases at cholesterol levels above 150 mg/dl. I already showed above that the typical heart attack patient has normal cholesterol; also, [high cholesterol is associated with longer life](#).

He says the higher the LDL cholesterol, the more atherosclerosis. But in people over age 50, the lower the cholesterol, the greater the risk of death: [11% increased risk of death, and 14% increased risk of death from cardiovascular disease, with each 1 mg/dl decrease in cholesterol](#).

Roberts goes on to praise the efficacy and safety of statins. However, [more recent trials of statins have been less than spectacular, and many found no benefit](#).

Is it important to lower elevated serum triglyceride levels?

Yes.

Triglycerides are not cholesterol, and if it's important to lower them – and

it definitely is – then that shows that something besides cholesterol causes atherosclerosis. [Elevated triglycerides are seen in diabetes and insulin resistance.](#)

Can niacin and fibrates be used effectively and safely in combination with the statin drugs?

Yes.

[No incremental benefit to niacin.](#)

[“Any potential reduction in cardiac mortality from fibrates is offset by an increased risk of death from noncardiovascular causes.”](#)

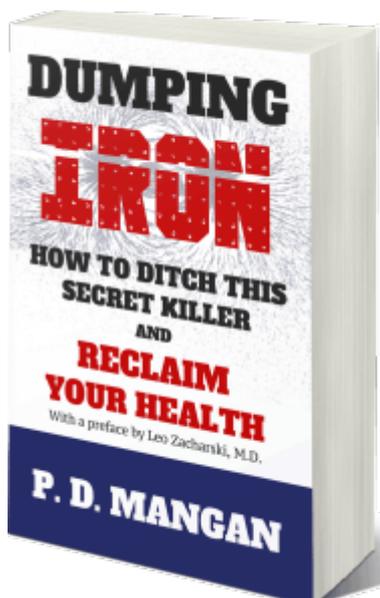
Conclusion

Dr. Roberts is wrong in most if not all of his assertions and conclusions. Cholesterol doesn't appear to cause cause atherosclerosis.

Yet this is the conventional wisdom used by doctors to treat patients right now.

Yet another instance in which mainstream medicine got it wrong.

PS: For excess iron as a cause of heart disease, see my book, [Dumping Iron.](#)



PPS: [Check out my Supplements Buying Guide for Men.](#)