

Looking at Isolated Facts instead of the Whole

There are a number of factors that are associated with heart disease, such as ¹

- Lipid levels (cholesterol, LDL cholesterol, HDL cholesterol, triglycerides, Lipoprotein(a))
- Blood pressure
- Thrombotic tendency
- Cardiac rhythm
- Endothelial function
- Systemic inflammation
- Insulin sensitivity
- Oxidative stress
- Homocysteine level

There can be a tendency for researchers and commentators to become attached to one particular area and not be able to see the relationship and interconnectedness with the different aspects of the same disease.

Also, much research is focused on individual components of nutrition, such as individual minerals, vitamins, or components such as fats or saturated fats.

Once again, researchers can become attached to one particular element of nutrition. We search for the magic supplement or the one miraculous cure.

Nutrition is the result of endless number of components in food. Health is the result of the relationship between all that we eat (and absorb during digestion), our relationships with others, the community that we live in and the world that we inhabit.

Looking at individual components of food in isolation can never give a complete picture.

Normal is not Necessarily Healthy

One difficulty in accepting the role of cholesterol in heart disease is that the “normal” ranges in Western countries are unhealthy. It is also normal to die from heart disease. 31% of Australians (that is, 45,600 people) died from cardiovascular diseases in 2011.

In the 1940s, in the USA, 95% of the population had values below 7.2 mmol/L. ²

Most heart attacks were occurring in people with cholesterol levels below 7.2 mmol/l. It is understandable that the majority of doctors did not consider blood cholesterol relevant to heart disease when most heart attacks occur in people below this level - “normal” does not

mean healthy.

According to the Mayo Clinic, cholesterol should be below 200 mg/dL (5.2 mmol/L).

However,

- Dr Bill Roberts (previous long-time editor of the medical journal *Cardiology*)
- Dr Bill Castelli (former director of the Framingham Heart Study)
- Dr Caldwell Esselstyn (former surgeon at the Cleveland Clinic)

have stated that they have never seen a heart disease fatality when cholesterol levels are below 150 mg/dL (3.9 mmol/L).

Autopsies of 300 male soldiers killed in action in Korea showed 77.3% of the soldiers had gross evidence of heart problems. The average age was 22 years, fit and active and had not been diagnosed with heart problems.

Food and Health is Big Business

The Food and Nutrition Board (FNB) of the National Academy of Sciences, has the responsibility every five years to review the nutritional requirements and make recommendations.³ This is a large (900 page) report.

In their report, published in 2002, it stated:

To meet the body's daily energy and nutritional needs while minimizing risk for chronic disease, adults should get 45% to 65% of their calories from carbohydrates, 20% to 35% from fat and 10% to 35% from protein....Added sugars should comprise no more than 25% of total calories consumed.... added sugars are those incorporated into foods and beverages during production [and] major sources include candy, soft drinks, fruit drinks, pastries and other sweets.

Recommendations for fat and protein are not based on any scientific evidence and are far above healthy guidelines.

Below is a list of corporate sponsors of the FNB report:

- M&M Mars

- The Dannon Institute, a leading dairy-based consortium
- International Life Sciences Institute, which is a group of fifty food, supplement and drug companies
- Coca-Cola
- Taco Bell
- Burger King
- Nestle
- Pfizer
- Roche Vitamins

The chairman of the FNB has been an important consultant to several major dairy-related companies (National Dairy Council, Mead Johnson Nutritionals, which is a major seller of dairy-based products, Nestle Company and a Dannon yogurt affiliate)

He was the chairman of the Dietary Guidelines Committee that establishes the Food Guide Pyramid and sets national nutrition policy affecting the National School Lunch and Breakfast programs, the Food Stamp Program and the Women, Infants and Children Supplemental Feeding Program.

The Physician's Committee for Responsible Medicine obtained a court ruling that ordered the committee members to reveal their industry associations. Six of the eleven committee members had links to the dairy industry.

Distrust of Authorities

A number of popular books contend that we have been lied to about our health by the medical authorities. This program stated that the medical authorities have lied to us for decades regarding the role of saturated fats and cholesterol in heart disease.

Books such as *The Great Cholesterol Myth* by Jonny Bowden (Naturopath) and Dr Stephen Sinatra (Cardiologist) claimed that researchers manipulated results to falsely accuse cholesterol and saturated fats in the cause of heart disease.

Whilst there is much to be wary of in interpreting medical research results, we need to be equally careful in examining such claims.

Where is the evidence that:

- Ancel Keys "cherry-picked" those 7 countries (Italy, Greece, the Netherlands, Finland, Yugoslavia, Japan and the United States) because they fitted his hypothesis that

saturated fat caused heart disease.

- It's well known that cholesterol helps fight infections – it helps knock out toxins from harmful bacteria. . . . So a low cholesterol may leave you with an increased risk of infection.
- And lowering the cholesterol especially in older people, who tend to have low cholesterol anyway, risks depression and lower vitamin D
- So the best advice would be to forget about saturated and unsaturated fats, and instead think about whether the fat or oil is from a healthy source.
- Lowering cholesterol does not reduce the death rate, as people with low cholesterol die of other causes like cancer.
- When inflammation occurs in our blood vessels, cholesterol rushes to the scene to smooth over the patch of inflammation. It collects around the patch and forms a plaque. So cholesterol is in fact trying to help fix the problem not causing it.
- Cholesterol is the mother hormone from which all the other hormones are made. This process may be blocked by lack of the right nutrients such as B vitamins, zinc and magnesium. The cholesterol then backs up as it cannot convert into the right hormones. This results in a combination of high cholesterol and low sex hormones leading to low libido, fatigue and hormone imbalances.

Conflicting Evidence

There is a lot of conflicting evidence in books, websites, the media and research papers.

We are told to follow a Palaeolithic diet, low-carbohydrate diet, low-fat diet, avoid saturated fats and trans-fats, avoid the sun, eat dairy to obtain calcium and prevent osteoporosis.

What do we believe?

Often when we are confronted with conflicting evidence, we simply believe what we want to believe and continue to doing what we have always done.

Misleading evidence from clinical trials can result from inappropriate comparisons between the sampled populations.

Too frequently, the control group and the intervention group in a trial are both eating a very similar and unhealthy version of a high fat, high protein diet.

So it is not really surprising that the minor changes made in the intervention group show little change to the control group.

Another complication is that a randomised trial is often considered to be the best way to test a hypothesis. It is challenging to divide people into two groups without the individuals knowing that they are in the control group or the intervention group. If people in the trial are not committed to making the big dietary changes to improve their health then it is unlikely that they will have a high compliance rate for their dietary regime.

Instead of using randomised trials, researchers can look at populations that are already committed to a certain lifestyle. The Seventh Day Adventists studies have provided valuable information in relation to diet.

Some popular authors give a long list of reference papers to support their conclusions. Upon reading the cited papers, it is not uncommon to find that the author has completely misinterpreted or simply lied about the material.

The Whole-Food Plant-Based Diet is Inconceivable

In 1985, the Nobel Prize in Medicine was awarded to Michael Brown and Joseph Goldstein “for their discoveries concerning the regulation of cholesterol metabolism.” They wrote ⁴

If the LDL-receptor hypothesis is correct, the human receptor system is designed to function in the presence of an exceedingly low LDL level. The kind of diet necessary to maintain such a level would be markedly different.

It would call for the total elimination of dairy products as well as eggs, and for a severely limited intake of meat and other sources of saturated fats.

They also state that “such extreme dietary change is not warranted for the entire population” because of the “severe social and economic consequences”.

Perhaps the extreme social and economic consequences of *not* implementing that diet far outweigh the consequences of continuing to farm and feed ourselves in our habitual manner.

To be fair, this was written in 1984.

More recently, in 2006 Dr Brown said to *Academy of Achievement* participants,

The real news is that we shouldn't really need these drugs, that for those of us who have normal genes, the reason why our blood is being filled up with

cholesterol is because we are basically eating too much cholesterol and too much animal fat. And if you look at populations where the diet is lower in cholesterol and fat, they don't need these statin drugs. They have low cholesterol in their blood and they have twenty times lower rate of heart attacks than we do in the United States.

Inevitable Consequence Of Aging

In the early part of the 20th century, the prevailing belief was the heart disease was inevitable.

In the 1940s, students were told that atherosclerosis was an inevitable accompaniment of aging. It was a “degenerative disease about which nothing could be done and that was that”.⁵

Even today, this view is still held by some, including some cardiologists.

According to Dr Ernest Curtis, a cardiologist from California,⁶ “Everybody has atherosclerosis to one degree or another. It is simply a biological fact of aging.”

Below is different point of view.

All males who are 65 and all females who are 70 who have been exposed to the traditional Western diet have cardiovascular disease and should be treated as such.

Professor Lew Kuller, University of Pittsburg School of Public Health

Footnotes

1. Hu, F. B. & Willett, W. C. (2002) Optimal Diets for Prevention of Coronary Heart Disease. *Journal of American Medical Association*. 288 (20), 2569–2578.
2. Steinberg, D. (2007) *The Cholesterol Wars: The Skeptics vs. the Preponderance of Evidence*. San Diego, CA: Academic Press.
3. Campbell, T. C. & Campbell, T. M. (2006) *The China Study*. Dallas USA: BenBella Books.
4. Brown, M. S. & Goldstein, J. L. (1984) How LDL receptors influence cholesterol and atherosclerosis. *Scientific American*. 251 (5), 58–66.
5. Steinberg, D. (2007) *The Cholesterol Wars: The Skeptics vs. the Preponderance of Evidence*. San Diego, CA: Academic Press.
6. <http://www.prweb.com/releases/2011/5/prweb8398286.htm>