

## Why all the Confusion and Conflicting Information on Nutrition?

### Follow the Money

There are literally hundreds of diet books on the market advocating different strategies on achieving the ideal body, the perfect weight, or even optimal health. How do we know which ones offer sound nutritional advice and which ones don't? This is an excellent question and one that deserves pondering. First, popular diet books are not peer reviewed. What does this mean? It means, "These authors can print anything, whether true or not!" Virtually none of the authors of popular diet books are held accountable for what they print. In contrast, information that has been published in a scientific journal has undergone the process of peer review. This means that viable studies have been conducted by credentialed professionals that can be replicated with the same results and have been reviewed by professionals in the field of research to which the subject pertains. Researchers are held accountable for what they publish. If it can not be validated by their peers, it is not approved for publishing. Second, if one checks up on the background of most popular authors, one will discover they are unlikely to have any training in the field of nutrition or experimental research at all. Third, while some authors might make reference to studies, it is a good idea to look up the study yourself and see if they are citing the correct information. Some authors may cite material that does not back their claims to appear legitimate, knowing the majority of the public isn't going to look past the immediate page. While it sounds deceptive, it is rampant in an economy that is profit-based. The higher the book sales, the more the profit. Many fad diets are unhealthy and dangerous, the Atkins diet also known as the 'nightmare diet' is a perfect example where a high animal-based protein diet led to early mortality rates. There is no regulation on the material printed within diet books to be accurate or even healthful.

2. Nutrition does not fit in to modern health care. Not only are most popular authors not trained, but doctors are not trained on nutrition. They are experts in drug treatment and surgical intervention.
3. Not only are book sales motivated by money but the entire economy is a profit-based system, this includes the health care system. No one will argue that our modern capitalist society is money driven. When we accept this fact, we begin to understand why there is so much misinformation in the market place. This profit-based system drives research as much as anything else. When funding comes from industry

- researchers are not likely to jeopardize their funding by publishing results that don't represent the best interest of the funding source. Researchers will tend to publish favorable results to secure future funds.
4. Policy is influenced by the food and drug industry. This occurs not only with research, but with policy boards and policy makers. The Dietary Guidelines Committee that makes the suggestions for the Women Infants and Children (WIC) program, the school lunch program and the hospital program is heavily biased towards promoting animal-based foods. This should be a surprise when plant-based diets are associated with lower chronic disease and animal-based diets are associated with higher chronic disease. Only by court order was it revealed that 6 out of the 11 members (the majority) of the committee had associations to the dairy industry. Furthermore, the chairman of the committee was found guilty of accepting more than the maximum amount of money allowed without being disclosed to the public.
  5. Industry influence is almighty. Consider that tobacco profits exceed 35 billion dollars annually, while alcohol revenue exceeds 16.5 billion. The beef industry brings in more than 60 billion in annual revenue and the dairy industry exceeds 34 billion dollars in the U.S. alone. This is more than the tobacco and alcohol industries combined! Tobacco accounts for 6 million deaths annually, alcohol accounts for 88,000; nutrition accounts for a whopping 1,282,000 annual preventable deaths each year. Now consider the drug and supplement industries. Global pharmaceutical revenues top trillions of dollars annually and adverse drug effects are responsible for 106,000 deaths and another 7,400 deaths occur from medication errors in the U.S. every year. To appreciate the lunacy, consider the medications to lower blood pressure and cholesterol, they *do not* reduce heart attack death and actually cause more complications. Heart disease is the number one killer in the U.S. with 474,000 annual deaths, followed by cancer at 371,000 deaths annually. Now consider the supplement industry that clears more than 61 billion dollars annually with no evidence to show long term benefit and plenty to demonstrate long term supplement use may actually be harmful to health.
  6. It is not surprising that industry promotes itself through the media. The beef and dairy industries have a 30 billion dollar annual budget for advertising. In contrast, the fruit and vegetable industries only have annual budget of 30 million.
  7. Understanding industry ties to government, we recognize why there are millions of dollars in government subsidies given to the beef and dairy industries each year that artificially lowers prices to consumers.

This practice is so vagrant that it actually violates the fair trade agreement of the World Trade Organization. In case you are wondering, there are absolutely zero (zilch) dollars in government subsidies to support fruit and vegetable farmers. These lobbyists are a powerful force in congress.

8. Food labels are created to sell more products. There are no laws governing what is printed on a package. Manufacturers can claim “low fat, fat free, calorie free, raw,” and so forth and do. Always read the ingredient list. Even the nutrition facts may be manipulated by diluting the percentage of fat by weight by adding water, refined flour, or sugar or by making the serving size so miniscule that numbers can actually be rounded down to zero.
9. One of the most surprising factors to consider is looking at how research is conducted when applied to nutrition. It turns out the gold standard, ‘double blind placebo studies’ aka ‘randomized clinical trials’ that work well for a single cause to produce a single effect does not apply for nutritional science. For example, an apple has within it hundreds of nutrients that produce any number of reactions within the body; by its very nature, it is inherently complex and cannot be viewed as a single activating agent. While the gold standard study might apply to drugs, it clearly does not apply to food which cannot be studied as isolated nutrients when a single meal might have thousands of nutrients all creating unique chemical reactions in the body simultaneously. Even with drugs, there are side effects that occur in addition to the primary target response. Imagine the multitude of side effects from a single meal when you consider the body has 100 trillion cells and 100,000 enzymes all responding to the same meal in a multitude of ways. It is virtually impossible to calculate the many possible reactions that take place. The best way to study nutrition is not the gold standard used for drugs, which Dr. Campbell refers to as ‘reductionist science’ where scientists attempt to isolate individual nutrients to study them. Humans simply do not consume isolated nutrients, we consume whole foods. Much like with drugs where scientists attempt to derive the healing qualities from herbal plants and replicate them in a chemically isolated form, with supplements scientists attempt to derive the healing qualities from foods in the form of vitamins and minerals and replicate them in an isolated form. Isolated compounds do not behave in the body the same way a whole food does. An example lies with beta-carotene. In nature, found in fruits and vegetables and when

consumed in these whole food forms, beta-carotene has been found to be a powerful anti-oxidant and has been shown to slow cancer growth, most notably lung cancer. Taken in supplement form, however, beta-carotene actually increases lung cancer rates.

10. Media may select and publicize fragments of information out of context. A perfect example occurred in 1982 when the highly acclaimed study from the National Academy for Sciences (NAS) was released reporting the positive effects of whole foods and identifying their nutrient qualities. It was the first such report to claim a connection between diet, nutrition and cancer. Rather than advocating a beta-carotene rich diet that was shown to have a positive influence on slowing cancer growth, the media jumped on board professing the value of isolated nutrients like beta-carotene. The supplement industry capitalized on this chance to profit from media exploitation and the multi-billion dollar supplement industry was born.
11. Nutrition controls gene expression, yet genetics research continues in hopes of finding a magic cure for chronic disease. Why? Genetics research, drug development, and supplements all lead to products and profits. In contrast, research funding hardly exists for diet.
12. Why is nutrition so unpopular? The simple truth: healthful eating doesn’t yield the need for products, hence profits. Diet is, in two words, ‘low profit.’

Sources:

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