



"Where's the Beef?" Question Authority

What is the best way to improve economy of running? How do I recover from back pain more quickly? Is it too early for me to have total knee replacement? How individuals obtain answers to questions like these types of questions has changed dramatically because of the Internet. A study by the Pew Internet & American Life Project www.pewinternet.org in 2003 reported that 67% of Americans expect they can find reliable information about health or medical conditions online. Eighty percent of internet users searched online for health topics.

This is a relatively new paradigm. In the past individuals would have gone to a health care provider for this type of information. Much of what appears on the Internet is of questionable credibility. Consequently, obtaining health information directly from the Internet places the responsibility on the individual to assess its credibility.

Many readers will remember the infamous "Where's the Beef?" television commercials from the 1980's. With regard to the Internet, there is no question that there is a lot of beef out there. The next question that needs to be asked, though, is "What is the quality of the beef?" Where is the evidence? How do we know whether something is true or not?

Whether health or training information is obtained from the Internet or from other sources there are some common sense guidelines to remember when assessing the credibility of the information. There is a hierarchy of what is termed best available evidence.

The lowest level of evidence is intuition. "I know something is true simply because I know it."

The next higher level of evidence is based on some authority. "I know something is true because some authority or expert says it is true." Much of what is practiced in the area of designing exercise and training programs is based on this level of evidence: "Coach said it is true therefore it is true." Older runners may remember a time when coaches recommended not drinking water while exercising because it would cause cramps. Of course now we know if you do not drink water while exercising in hot weather you can die.

The next higher level of evidence is using logic and reasoning to explain things. "I know something is true because it makes sense or because there is some logical explanation for why it is true." When you sweat a lot you have a need to replace the lost fluids. This makes sense and it is logical. Stretching exercises make a muscle flexible and longer and this will prevent injury. This may or may not make sense.

The highest level of evidence is based on research. This involves gathering observations and data in a way so that others can reproduce the results. Not all health care professionals or coaches are trained or qualified to produce credible scientific research. They all, however, should be qualified to critically read and decide how to apply the results to real life situations.

Research published in peer reviewed publications carries a great deal more credibility than research published in editorial reviewed publications. Examples of editorial reviewed publications are magazines such as Runner's World, books on running, and newsletters. Peer reviewed research is published in professional scientific and medical journals. Material published in editorial reviewed publications often cites or references the original peer reviewed research. An excellent source on the Internet to check original peer reviewed material is the National Library of Medicine web site <http://www.ncbi.nlm.nih.gov/sites/entrez> . This is a good place to go to seek answers to questions regarding exercise, training and health care.

The problem for most people in dealing with peer-reviewed research, however, is that it is difficult to use unless you are trained in critically reading scientific papers it can be difficult to assess the information found there. This is where a health care provider or coach continues to be a valuable resource. Ask your health care provider or coach to critique information that you find on the Internet. If you find information on an internet site with health information, I would be happy to critique the information, send me an email at Damien@DamienHowellPT.com.

The news from the business world has provided examples of why it is important to question authority. Financial advisors have been accused of not being independent from the investment opportunities they recommended, and they may act in ways that do not benefit those whom they provide advice. Avoiding these types of conflicts of interest is no less important when it comes to medical, health or exercise. When making important decisions regarding health care it is best to seek the highest level of evidence you can find. As the bumper sticker states: Question Authority.