

Critique of health related information sources

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Critique of Health Related information sources Abstract Background - The internet is a vast source of information containing over 70 000 health related sites and discerning credible sites can often be a challenging task. It is important however so that reliable information can be obtained. Methods - A series of critique questions were devised to determine the credibility of a health based online journal article and health based website. Questions were determined according to guidelines based on accuracy, links to authority, current relevance, scope of coverage, objectivity and design of each source advised by Hendrix and Winters (2001) [2].

Findings - Journal Article; was deemed a credible source coming from a peer reviewed journal with many credible references and no apparent bias or conflict of interest. The main author had significant authority and relevance in the given field and discussions were examined in depth. Most limitations are accounted for though no mention was made regarding possible complications of using slightly out dated data. Findings - Website; was deemed a non-credible source according the critique questions.

Very few authors could be linked to articles and most articles were associated with product promotion indicating high levels of bias. While articles were maximum 4 years old, no references were made to original findings and therefore age and accuracy of data could not be confirmed. Conclusion - keeping in mind critiquing criteria is important when discerning any information sourced from the internet whether it is peer-reviewed or not as this does not guarantee 100% credibility. The website chosen was relatively easy to discern.

More thought and critical thinking would be required to discern more popular health websites. Introduction Websites can be created by anyone with access to a computer and internet [1] and are subject to misleading or incorrect information whether accidentally or maliciously [2]. There are over 70 000 health-related websites available [3] the form of journals, websites, blogs, other social media, the list goes on. As a health professional, one needs to be aware of the extensive amounts of new and existing research available over the internet, but also how to evaluate, discern and decide which information is reliable. Deciding the credibility of a website is not always straight forward. Research shows that even credible websites may not necessarily always provide highly accurate health information [4]. A study found internet to be a desirable medium used by college students with 74% of participants obtaining health information from the internet via websites such as Yahoo, Ask Jeeves and health. com [5].

Some of these sites may seem reputable but are not subject to peer-reviewing. Information subject to peer-review, such as online journals, is significantly more likely to be credible and contain reliable information [6]. The aim of this report is to evaluate and critique, two health related internet sources, a journal article ' Energy density of foods and beverages in the Australian food supply: influence of macronutrients and comparison to dietary intake' [7] and a website ' Goodhealth. com' [8] Methods

Sources were critiqued based on criteria adapted from Hendrix and Winters (2001) [2]. Detailed questions were answered in regards to the following topics; accuracy, links to authority, current relevance, scope of coverage, objectivity and design of each source. This information was then critically

analysed to determine the reliability and credibility of each source. Findings
Journal Article - Energy density of foods and beverages in the Australian food supply: influence of macronutrients and comparison to dietary intake. [7]

This article explores the relationship between energy density and the percentage of energy as fat, carbohydrate or percent water weight of individual foods and beverages listed in the 1999 Australian Food and Nutrient Database [9] composed by Food Standards Australia and New Zealand [10], as well as Australian dietary intake data obtained from the 1995 National Nutrition Survey (9). Links are made between relationships found in this and other studies towards the increase in overweight and obesity in Australia and worldwide.

Analysis This is a peer-reviewed study sourced from the European Journal of Clinical Nutrition, straight away indicating likely reliability. Methods, while generally clear, failed to sufficiently describe how energy density was calculated for Australian dietary intake data. Logical assumptions can be made as to how this was done, but further clarity is required. Data used was collected from 3673 individual foods, 247 beverages and dietary information from 13 858 people.

This high volume of information and participants allowed for greater range of variances and increased reliability of findings. Results clearly presented findings and statistical evidence to support relationships (or lack of) between energy density and main macronutrient energy source. The article is well referenced, citing 23 references, particularly articles from the American Journal of Clinical Nutrition plus other journals and databases such as the

Australian Food and Nutrient Database. According to SciVerse Scopus [7] this article is cited in 13 additional articles.

Author, TC Crowe, Associate Professor and academic at the School of Exercise and nutrition at Deakin University has been involved with many studies prior to and since this article [11, 12]. Though published in 2004, all the data used is from 1999 and 1995, making it slightly outdated. Due to the nature of the study, date is an unlikely relevant criteria. It is possible an influx of new products could have affected results of the study, though for this to be determined, a similar study would need to be carried out using the most recent AusNut from 2007 [9] .

Recent studies that support the findings of this article are referenced throughout the discussion, though most focus more on the relationship between energy density and overweight and obesity problems. As this is published in a nutrition journal, it can be assumed that the target audience is a combination of health professionals, academics, university students and government officials. The depth in which the article explains its findings is thorough yet simple, making it easy to understand even without a health or science background.

The results section visually represents the data so that relationships can easily be seen and supports with appropriate statistical evidence. The discussion section does not go into great scientific detail but includes supporting information from other studies and focuses on the relationships between energy density and macronutrients and the links towards overweight and obesity issues. There is no apparent evidence towards any conflict of interest regarding the main author and study. Crowe was
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guarantor and involved in all stages of the study with support from the remaining authors [7].

Data used was collected by independent organisations, which further eliminates any possibility of any bias while publication in a European journal increases credibility from an Australian circle to a more global view. This is an observational study design which provides level III-3 evidence according to the NHMRC guidelines [13]. The design of the methods allowed results to be presented in a clear and concise manner, easily portraying the studies findings. The study acknowledges that it was, however, limited by the following; 1. Population daily food intake was collected over a 24 hour time period.

Dietary habits are subject to change daily and different days could present different results. 2. No weighting system was used regarding daily food intake thus may lead to bias by under or over representing a particular food. 3. Comparisons cannot be made between individual foods and population daily intake due to differences in data sets. Other limiting factors may include differences in food consumption habits and availability between 1995 and 1999. Evaluation The evaluation provides sufficient information to determine this study is a reliable source.

While there is some room for improvement in methods and certain limitations need to be noted, it comes from a reliable source and cites many articles from similarly reliable sources. There are no apparent conflicts of interest and whilst slightly outdated, the results are not likely to vary greatly over time. Health Related Website – [www. goodhealth. com. au](http://www.goodhealth.com.au) The website titled ‘ Good Health Now! ’ [9] is a small collection of health related articles <https://assignbuster.com/critique-of-health-related-information-sources/>

ranging from 2009 to 2012 along with links to recent health related news articles from ABC News [14] and Natural news [15].

Many (non news) articles have an external link located within the article. The website is well presented, aesthetically pleasing and seems to supply a varied range of health topics. After short investigation, however, it is apparent information on each topic is quite limited. Analysis When looking at the accuracy of the website there appears to be no process in which the information has been reviewed or critically analysed before being posted. No references are found within the text nor listed at the end with the exception of one article, which had a direct link to an article from the European Journal of Clinical Nutrition [16].

There were however, links in many articles to generally unfamiliar sites relating to the issue of discussion, often offering a product or service. While ABC News appears a reputable source, some headlines appear to have authors and quotes or references while others appear to be press releases containing relatively general and basic information. Articles within the website have 1 of 3 author names; Admin, Katrina or Guest. Searching Admin or Katrina produced no information though some information could be found regarding the Guest articles.

The end of each Guest article presented a small biography titled either Author Bio, Bio or no heading at all. Those without the heading Author Bio assumed the biography was not regarding the article author. While it is possible to contact site administrators through the site, no contact information is available. Accounting these factors no judgment can be made

on any authors level of authority or expertise with the exception of the few named Guest authors where further research would need to be done.

Considering the high number of links to related sites promoting products, there is a strong bias towards product awareness, particularly regarding Guest articles. No specific 'last update' date was found on the website though each article states the publishing date. Articles range in date from 2009 to 2012 appearing relatively current, however the audience are unable to determine the age of the data this information was sourced from. Aimed at health conscious adults, the website boasted a motto of 'enabling all the live a healthy, happy life' with a not so hidden agenda towards advertisement and product promotion.

While some articles provided some detailed information many were lacking in detail. The provided a brief overview to draw the customer in [17] but then required them to search further if truly interested. Language and detail was very simple therefore there was lots of room for improvement in detail and coverage of article in general. Evaluation While initially appearing professional, lack of evidence and references significantly demises the source's credibility, with the high amount of product promotion suggesting excessive levels of bias in featured articles.

Combined with lack of detailed, sufficient information this site appears to be neither reliable nor credible. Conclusion Completion of reviewing sources illustrates the importance of evaluating information found on the internet. The critiquing criteria used provided a solid guide to deciphering the reliability of each source. While journal articles are generally deemed a reliable source care must be taken to ensure they are peer-reviewed, even <https://assignbuster.com/critique-of-health-related-information-sources/>

then, this does not guarantee 100% reliability. Consequently, the critiquing criteria should always be kept in mind. Lack of credibility of the Good Health Now! 9] website was quickly apparent once investigation started. A lot more attention and investigation would be required if investigating more well known health websites such as health. com or WebMD. Credibility is a lot less apparent and investigation would become significantly more reliant on the critiquing framework. ?

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