MedlinePlus Evaluating Internet Health Information: A Tutorial From the National Library of Medicine

Revised August 2023

Chapters:

- 1. Introduction
- 2. Provider and Purpose
- 3. Information Quality
- 4. Privacy
- 5. Conclusion





Introduction

Welcome to the Evaluating Internet Health Information tutorial from the National Library of Medicine.

Using the internet to find health information is easier than ever. Sometimes it even finds its way to you when you aren't searching for it. For example, someone you know or follow on social media may share a link to online health content. Or they may share a photo or meme with health-related content. But how can you be sure the information is trustworthy? Health information that is false, not accurate, or misleading is known as misinformation.

Often, we don't realize we're sharing misinformation. Misinformation can be many things. Sometimes it is out-of-date facts or research. It can also be memes that started as jokes but now people take them seriously. Sometimes it is content meant to grab your attention. But if you share a social media post without being sure the content is trustworthy, you could be spreading misinformation. Sharing misinformation can be dangerous and even harmful.

You might feel overwhelmed knowing that misinformation is out there, but don't worry! By the end of this tutorial, you will have the tools to help you identify trustworthy health information online.





As an example, imagine that your doctor just told you that you have high cholesterol. You want to learn more about it before your next doctor's appointment. So, you do an online search and find these two websites.



These two examples of websites were made-up for this tutorial. But they show different ways that content may be arranged.

Both sites look professional, but anyone can put up a web page that looks good. This tutorial will take a closer look at these websites to show you how to uncover important clues about the quality of health information you might find online.





This tutorial explores three categories of questions to ask:

1) Provider and Purpose

In this case, "provider" means the people or organization that provides the information. You can't trust health information if you don't know where it comes from. So, you'll need to ask:

- Who manages the site?
- Why have they created the site? What is their purpose?
- What do they want from you?
- Who is paying for the site? Does the site's information favor the sponsor?

2) Information Quality

You don't want to make health decisions based on inaccurate information. These questions will help determine whether you can trust that you're getting the facts:

- Is the information reviewed by experts?
- Where did the information come from?
- Does the site make claims that sound too good to be true?
- Is the information up to date?

3) Privacy

A trustworthy website will be clear about its privacy policies. Check to see:

- Does the site ask for your personal information?
- If so, how will it be used?

You can usually find most of the answers on a website's main page or the "About Us" page. Let's look at the two sample websites for clues to help figure out if they are trustworthy.





Evaluating Internet Health Information: Provider and Purpose—Part 1 of 6

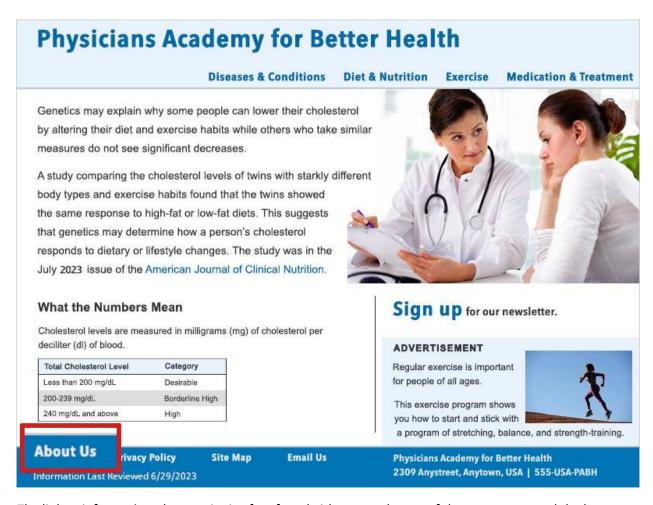
The first step to evaluating internet health information is to find out who is managing the site (the provider) and why (the purpose).

Let's begin with the Physicians Academy for Better Health site.

Physicians Academy for Better Health sounds like a very reliable site. But you can't go by the name alone.

To find out who created the site and why, look for the "About" or "About Us" link. On some sites, the "About" or "About Us" link may be located at the bottom of the homepage in the footer or at the top in the header. This is the first stop in the search for clues about a website's reliability.

It should say who is managing the website, and why. A mission or values statement often includes this information.

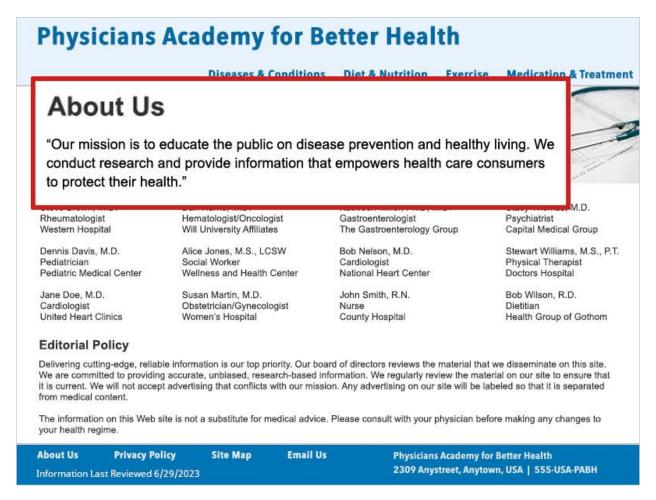


The link to information about a site is often found either near the top of the page or toward the bottom, as shown in this example.





On the "About Us" page, we learn that the organization's mission, or purpose, is to "educate the public on disease prevention and healthy living."



This example shows a mission statement on the "About Us" page.

Now we know the purpose of the Physician's Academy for Better Health website. Let's see if their "About Us" page tells us who is providing the information.



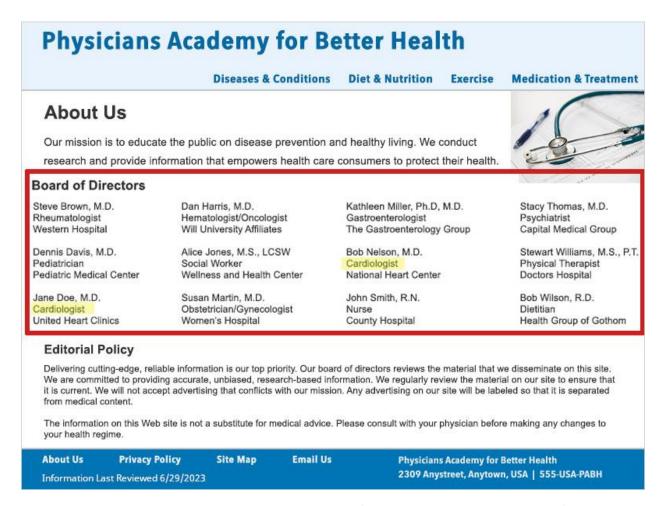


Evaluating Internet Health Information: Provider and Purpose—Part 2 of 6

On the "About Us" page, we learn this site is managed by a board of directors made up of health care professionals. The page also lists their areas of expertise.

Two board members are cardiologists (doctors who specialize in heart health).

This is important because you want reliable information about cholesterol, which affects heart health.



This example shows how knowing who is providing the information can help you to decide if you can trust the site.

Trustworthy sites also provide a way to contact the owners with questions or comments. So, check to see if there is a way to contact the organization managing the site.





This site provides an email address, a mailing address, and a phone number.



In this example, the contact information is located at the bottom of the page. Other sites may have a "Contact Us" page with their contact information or a form for sending questions or comments.

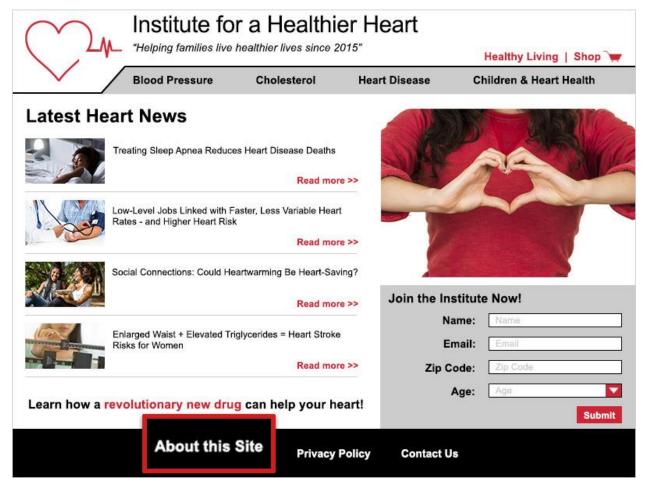
Now let's go to the other site and look for the same clues.





Evaluating Internet Health Information: Provider and Purpose—Part 3 of 6

The Institute for a Healthier Heart manages this website. They have an "About this Site" link.



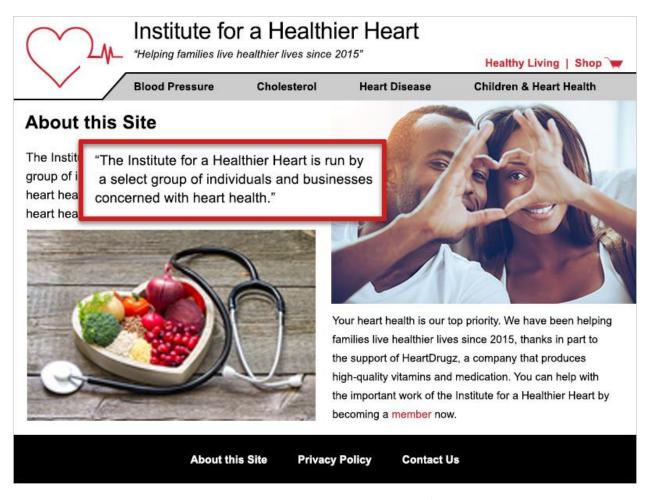
This example shows another way that a website may name and locate their "About" page.

This page says that the Institute consists of "individuals and businesses concerned with heart health."

Who are these individuals? Who are these businesses? It doesn't say. A trustworthy health website clearly identifies who is providing the information. Sometimes missing pieces of information can provide important clues!







In this example, the people who manage this site are not clearly identified.

Next, let's check the Institute's purpose.





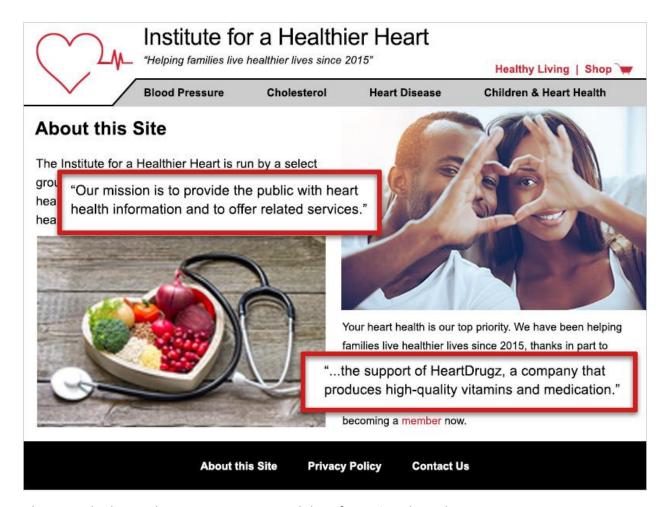
Evaluating Internet Health Information: Provider and Purpose—Part 4 of 6

The Institute's mission is "to provide the public with heart health information and to offer related services."

Can you tell if these services are free? The real purpose might be to sell you something.

If you keep reading, you'll learn that a company that makes vitamins and medicines helps pay for the site.

The site might favor that particular company and its products.

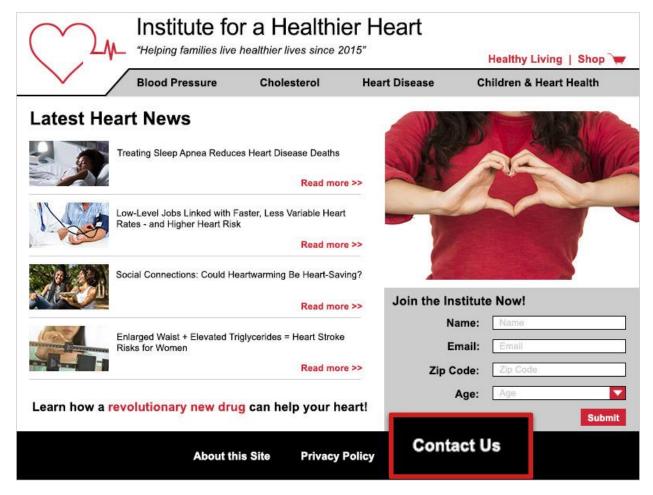


This example shows why it is important to read the information about the site.





What about contact information? There is a "Contact Us" link, but no other contact information is provided.



This example shows that contact information may be harder to find and/or contain less information on some sites.

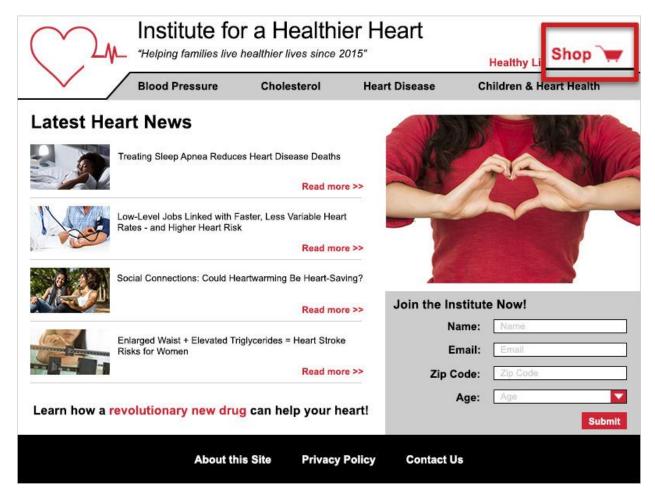




Evaluating Internet Health Information: Provider and Purpose—Part 5 of 6

Did you notice that the Institute for a Healthier Heart website has a link to an online shop?

That's a clue that the site's main purpose may be to sell something and not just to offer information. But the site may not explain this directly. You need to investigate!



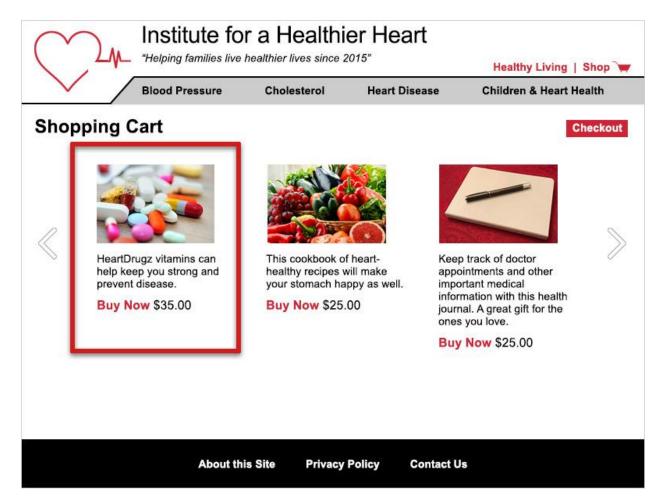
A site with a shopping cart as a main item on the page may be mostly interested in selling you something.





The online store includes products from HeartDrugz, the company that funds the site. This clue suggests that the site might show a preference for the drug company or its products.

Keep this in mind as you browse the site.



On this page you can see that the site's sponsor is selling heart vitamins on the site. This could create a conflict of interest that influences the type of information that the website offers.



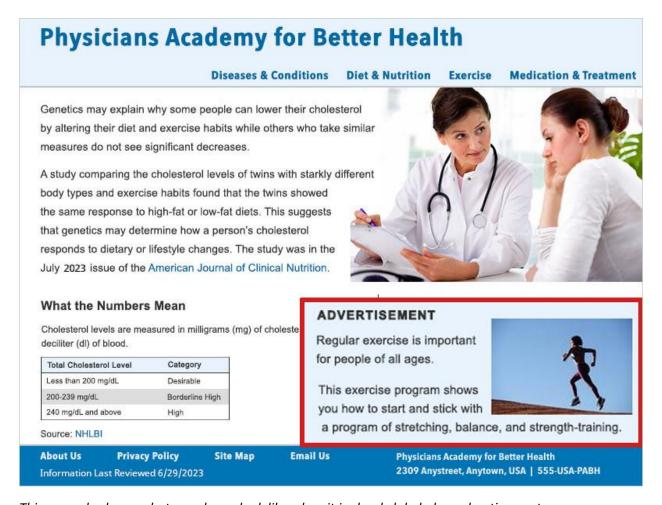


Evaluating Internet Health Information: Provider and Purpose—Part 6 of 6

Both of the example sites have advertisements.

When you see advertisements on a site, check if it is easy to tell the ads from the health information.

On the Physicians Academy page, the ad is clearly labeled as an advertisement. You can easily tell it apart from the content on the page. That's a good thing. They are making sure you don't confuse ads with their health information.

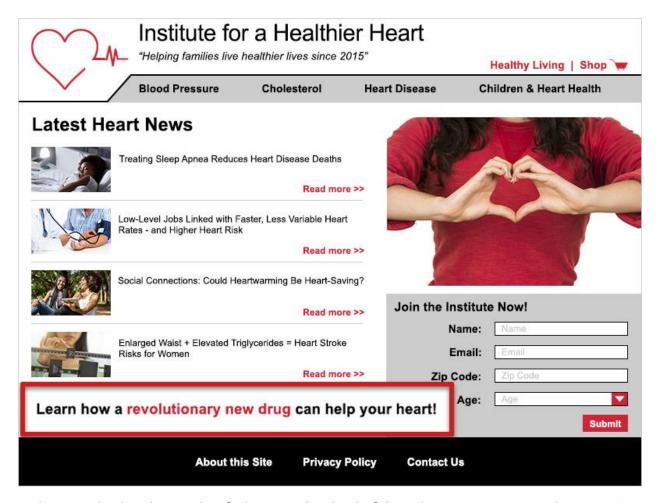


This example shows what an ad may look like when it is clearly labeled as advertisement.





On the Institute for a Healthier Heart site, the advertisement is not labeled as an ad. It is hard to tell the difference between the ad and the content. This may be done to encourage you to buy something.



In this example, the ad is not identified. You need to decide if the website is more interested in promoting a product or offering actual health information.

Next, let's look at evaluating information quality.





Evaluating Internet Health Information: Information Quality—Part 1 of 4

You now have some clues about who is publishing each site and why. But how can you tell if the information on these websites is high-quality?

First, find out where the information comes from or who writes it. Look for phrases like "editorial board," "selection policy," "editorial policy," or "review process." They usually point you in the right direction.

To look for these phrases, let's go back to the "About Us" page of the Physicians Academy for Better Health site.

They include their editorial policy. It says that the Board of Directors reviews all medical information before it is posted on the website.

We learned earlier that these board members are mostly trained health care professionals, including doctors and nurses. So, we know that they are qualified to review and approve medical content. The board makes sure that the information on the site meets their standards for quality.

Physicians Academy for Better Health

Diseases & Conditions

Diet & Nutrition

Exercise

Medication & Treatment

About Us

Our mission is to educate the public on disease prevention and healthy living. We conduct research and provide information that empowers health care consumers to protect their health.



Board of Directors

Steve Brown, M.D. Rheumatologist Western Hospital

Dennis Davis, M.D.

Pediatrician

Dan Harris, M.D. Hematologist/Oncologist Will University Affiliates

Alice Jones, M.S., LCSW Social Worker Wellness and Health Center Kathleen Miller, Ph.D, M.D. Gastroenterologist The Gastroenterology Group

Bob Nelson, M.D. Cardiologist National Heart Center Stacy Thomas, M.D. Psychiatrist Capital Medical Group

Stewart Williams, M.S., P.T. Physical Therapist Doctors Hospital

Editorial Policy

Pediatric Medical Center

"Deliveriing cutting-edge, reliable information is our top priority. Our board of directors reviews the material that we disseminate on this site. We are committed to profiding accurate, unbiased information. We regularly review the material on our site to ensure that it is current. We will not accept advertising that conflicts with out mission. Any advertising on our site will be labeled so that it is separated from medical content."

About Us Privacy Policy
Information Last Reviewed 6/29/2023

Site Map Email Us

Physicians Academy for Better Health 2309 Anystreet, Anytown, USA | 555-USA-PABH

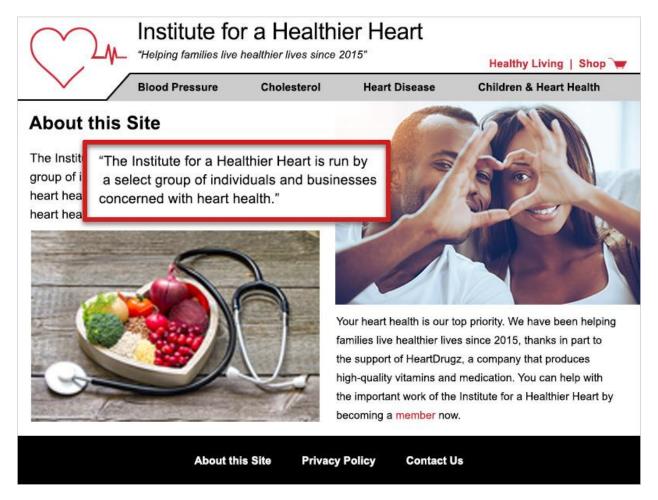
This example shows a clearly stated policy that explains how the Physician's Academy controls the quality of their information.





Let's see what the Institute for a Healthier Heart says about controlling the quality of their information.

You already know that a "group of individuals and businesses" is managing this site. But you don't know who these individuals are or if they are medical experts. There is no information to help you decide if these individuals are qualified to choose accurate or quality content.



This example shows how unclear a website's information sources and quality can be.

So far, what do you think about the quality of information from the Institute for a Healthier Heart?





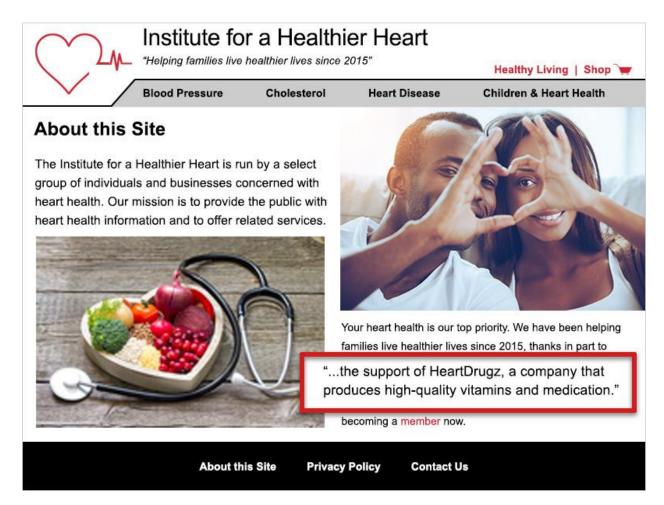
Evaluating Internet Health Information: Information Quality—Part 2 of 4

You learned from earlier clues that a drug company sponsors the Institute's website. It's possible that this company writes information for the website in order to promote itself and the products it sells. If this is the case, the information provided is biased and could be misleading.

Even if experts review the information that is posted on a site, you should continue to ask questions.

Look to see if the site clearly tells you where the information came from. Good sites should rely on medical research, not opinions. So, check to see if they give you the source of any research they mention.

It should also be clear who wrote the content.



This example says the site is getting support from a drug company, showing why reviewing the site information is important.

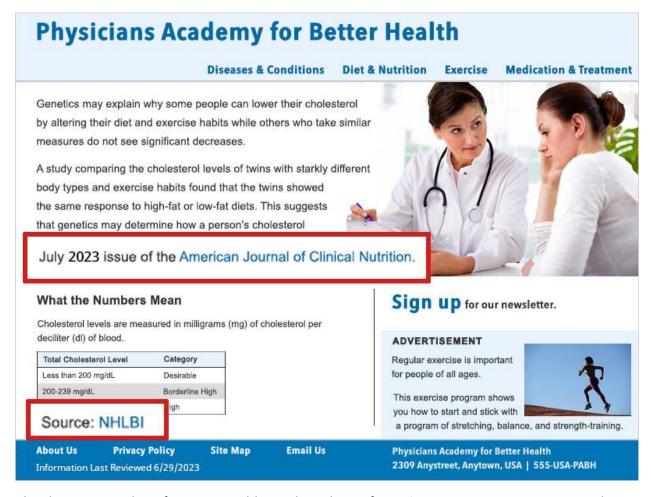
Let's compare what these websites tell you about where they get their content.





Evaluating Internet Health Information: Information Quality—Part 3 of 4

The Physicians Academy for Better Health site clearly labels the sources of their information.

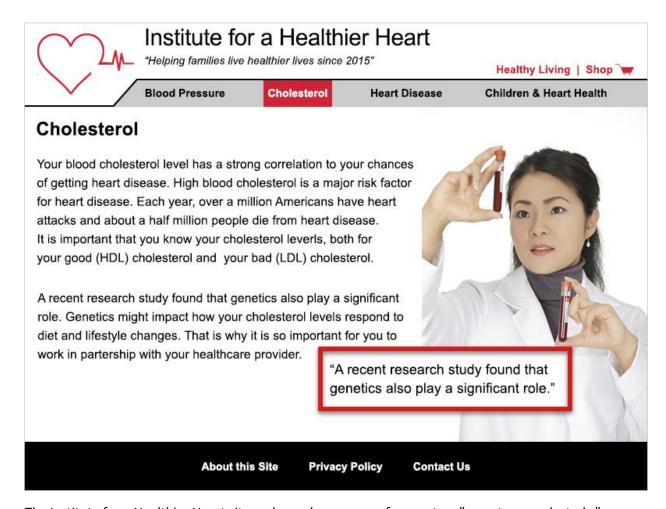


The Physicians Academy for Better Health site shows how information sources may appear on a website. This site even provides links to the sources so you can easily check them.





On the other website, we see a page that mentions a research study. Yet there are no details about who did the study or when it was done. There is no link to the study. It doesn't even say where the study was published. You have no way of checking if their information is correct. Could this study include misinformation?



The Institute for a Healthier Heart site makes only a vague reference to a "recent research study."





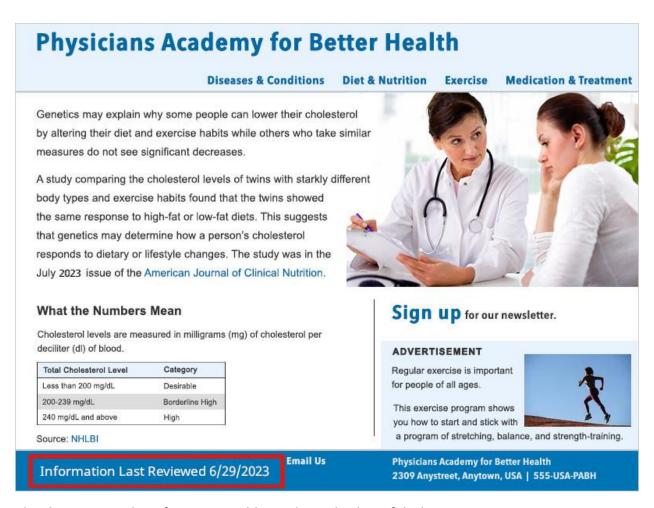
Evaluating Internet Health Information: Information Quality—Part 4 of 4

Here are a few more tips for evaluating the quality of health information:

Look at the general tone of the information. Is it too emotional? Does it sound too good to be true? Be cautious about sites that make unbelievable claims or promote "miracle cures." That could be misinformation. Neither example site presents information this way.

Check to see if the information is current. Out-of-date information can be hazardous to your health and is one form of misinformation It may not reflect the latest research or treatments. Look for signs that the site is reviewed and updated regularly.

On the Physicians Academy site, the bottom of the page shows when the information was last reviewed to make sure it's still accurate.

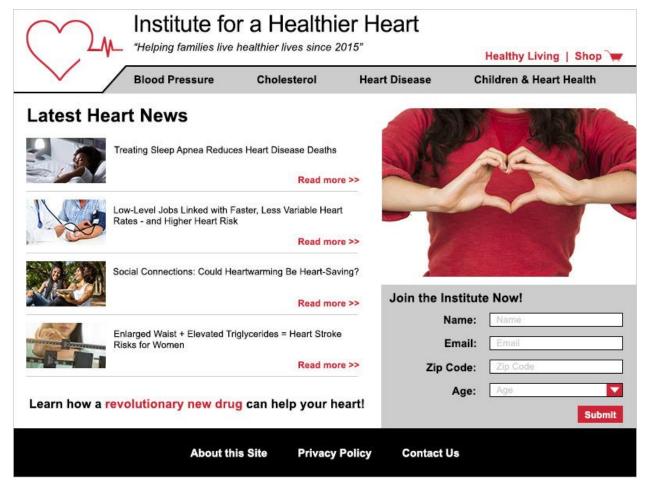


The Physicians Academy for Better Health site shows the date of the last review.





There are no dates on the Institute's pages. You do not know if the information is current, and there is no way to tell when the content was last updated.



The Institute for a Healthier Heart site only shows the date when the organization itself was formed. You can't tell if the information is ever updated.

Next, we'll see what you need to know about privacy on health information sites.

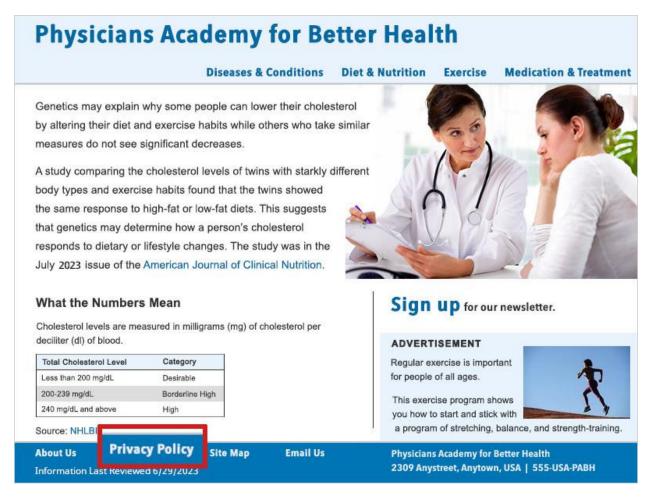




Evaluating Internet Health Information: Privacy—Part 1 of 3

Maintaining your privacy is another important thing to remember. Some sites ask for you to "sign up" or "become a member." Before you do, look for a privacy policy to see how the site will use your personal information.

The Physicians Academy site has a link to their privacy policy on every page.



The Physicians Academy for Better Health site clearly provides a link to their privacy policy in the footer area of their site.

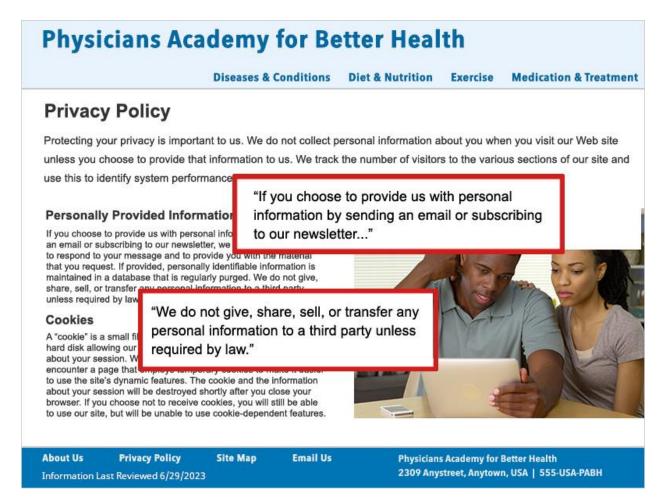
On this site, users can sign up for an email newsletter. This requires that you share your name and email address.





The privacy policy explains how your personal information will be used. It will not be sold or shared with other organizations.

Don't sign up for a newsletter unless you are comfortable with how your information will be used.



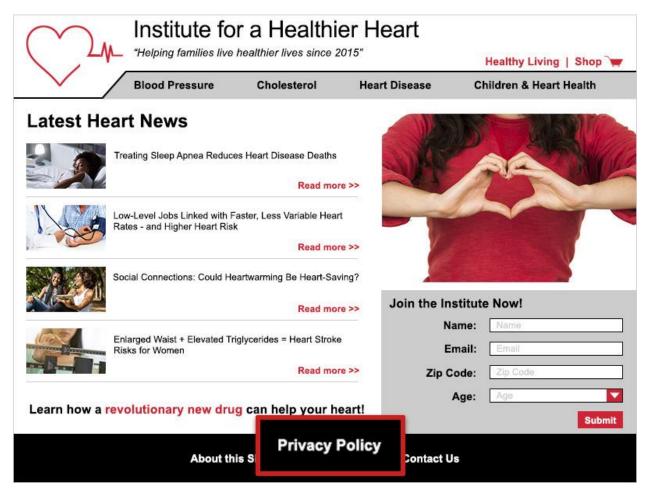
In this example, the privacy policy says that it is your choice to provide your personal information. It also says what they will not do with your information.





Evaluating Internet Health Information: Privacy—Part 2 of 3

The example website for the Institute for a Healthier Heart also has a privacy policy available.

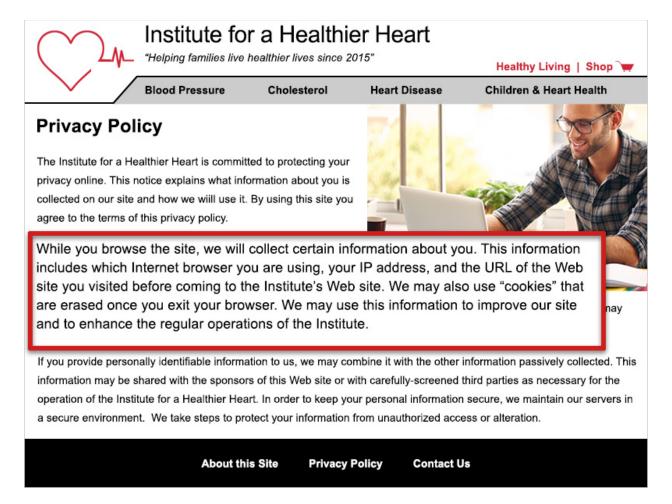


In this example, the link to the privacy policy is clearly visible.





The privacy policy says that the Institute collects information about everyone who visits their website.



In this example, we see that the website automatically collects certain information about you while you are browsing the site. But this information alone does not identify you.



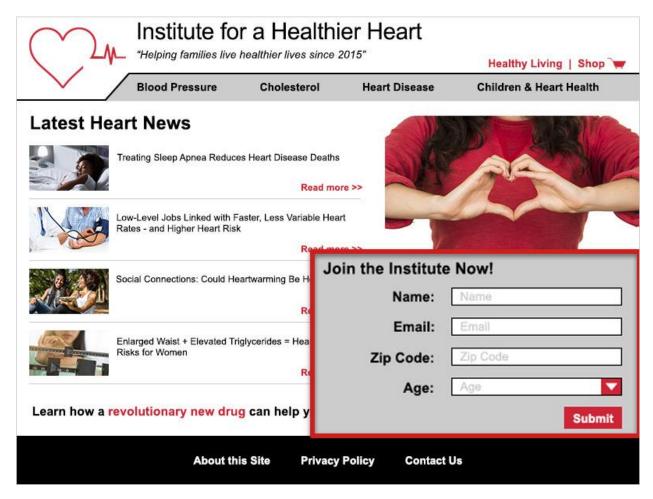


Evaluating Internet Health Information: Privacy—Part 3 of 3

The Institute site promotes a "membership" option that allows you to join the Institute.

And as you saw earlier, a store on this site allows you to buy products.

If you buy something or sign up for membership, you will be giving the Institute your personal information. Then your browsing history on the site can be linked with you specifically.



This example shows that your name, zip code and age are being requested. If you provide this information, it will identify you personally.

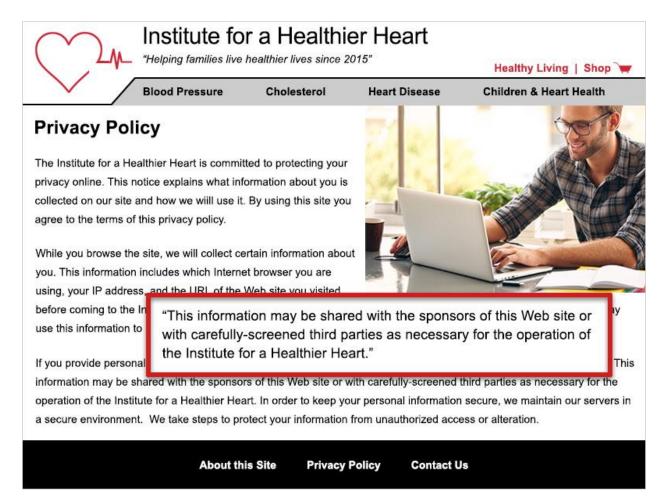




Before you provide any personal information, it's important to know how it will be used.

From the privacy policy, you can learn that the Institute will share your personal information with the company that sponsors the site. It may also be shared with others.

Only share your information if you are comfortable with how it will be used.



This example shows why it is worth taking time to read a site's privacy policy. It can help you figure out a website's true purpose and help protect the privacy of your personal information.

Which site can you trust? Let's review what we now know about each site.





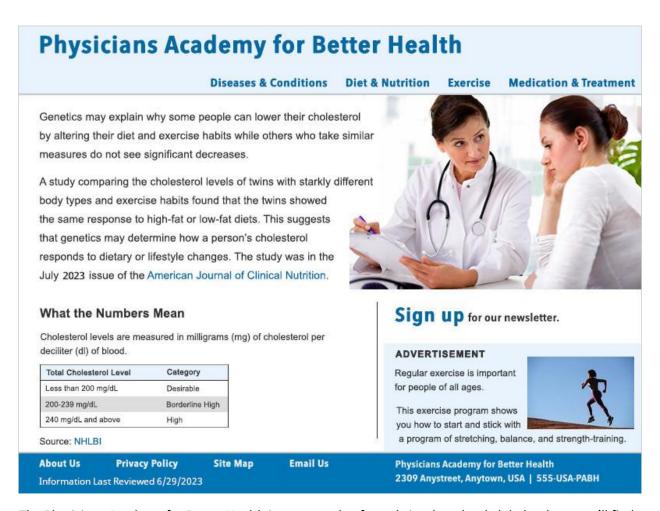
Evaluating Internet Health Information: Conclusion—Part 1 of 2

The Internet provides you with quick access to health information. But you need to be able to tell the difference between the good sites and the bad.

Let's review the clues to quality by looking at our two fictional websites.

The site for the Physicians Academy for Better Health:

- Is managed by health care experts
- Has a clearly stated purpose to educate the public on disease prevention and healthy living
- Labels advertising
- Reviews health information before posting it
- Explains the sources of data and research
- Is up to date
- Will not share personal information



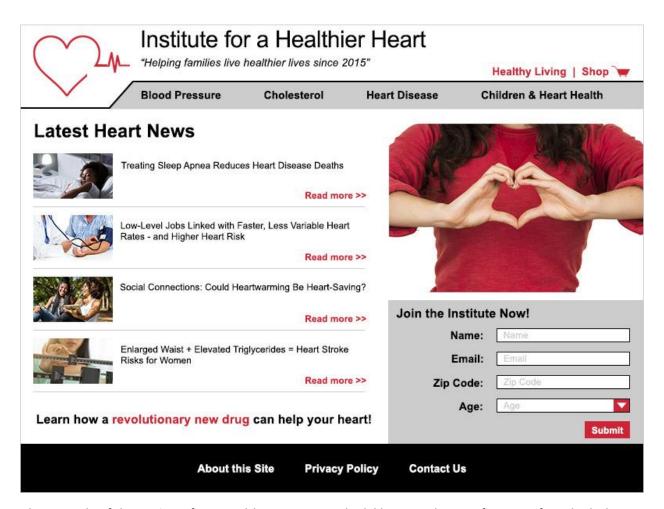
The Physicians Academy for Better Health is an example of a website that clearly labels where you'll find the information you need to decide on the quality of the site.





The site for the Institute for a Healthier Heart:

- Does not tell you who is managing it
- May have information that favors its sponsor
- Has an unclear purpose, but appears to be about selling products that claim to help your heart
- Does not label advertising
- Does not describe how information is chosen
- Does not identify the sources of information
- Does not tell how old the information is
- May include misinformation
- Might share your personal information with others



The example of the Institute for a Healthier Heart may look like a good site at first. But if you look closer, you won't find the facts you need to evaluate the quality of their information — and that's a big clue that the information may not be reliable.

Which website will you trust?





Evaluating Internet Health Information: Conclusion—Part 2 of 2

After comparing two example websites, the Physicians Academy for Better Health website is more likely to be a reliable source of information.



While websites may look professional and trustworthy, you can't know if you can trust the information they provide until you check out the provider and purpose, the quality of the information, and the privacy policy.

Use this <u>checklist of questions</u> to ask when browsing health websites or deciding what health information to share on social media.

Asking these questions will help you find quality health information online and avoid sharing misinformation. But there is no guarantee that the information will be perfect.

So, it's a good idea to check several high-quality websites to see if they have similar information. Looking at many good sites will also give you a wider view of a health issue.

But remember that online information is not a substitute for medical advice from your own health care provider. What you learn online may not be right for you.

Always talk with your provider before following any advice that you find online.





Patient/provider partnerships lead to the best decisions for your health.

To learn more about finding good health information, visit the MedlinePlus page on <u>Evaluating Health Information</u>. It tells you what types of websites are generally trustworthy. It also includes tips for evaluating health stories in the news and books about health.

This resource is provided to you by the National Library of Medicine. If you have your own website, we invite you to link to this tutorial.



