

Medicine in the Media: Reliable Health Information v. Fake News

One challenge of parenting is sorting through all available information about children's health. Some sources can be trusted, while others should be questioned.

Aside from your pediatrician, which sources for health information can you trust? Read on for information about the language of advertisers, good science, questioning your sources and evaluating new treatments or medicines.



Medicine ads: knowing the language

Commercials and magazine ads claim products help and heal. Websites claim to have "cutting-edge" health information. TV programs and newspapers report on the "latest" studies showing which treatments work and don't work.

Advertisers try many ways to get you to buy the products they are selling. They may use certain words or phrases to interest you, such as:

- "#1 pediatrician recommended" or "doctor recommended." These are marketing terms that try to get you to buy a product. Although the product may be recommended by a group of doctors, what the advertisers don't tell you is how many doctors or how long ago the recommendation was made. It could be five or 100 doctors surveyed 10 years ago.
- "Patented design." A patent means that the maker or inventor of a product has proven to the government that he or she was the first to create the product. In return, the government gives a patent and says that only the patent holder can make or sell the product for a certain period. A patent doesn't necessarily mean that the product is the best, is safe or will work.
- "Clinically shown." This phrase means that the product was tested on patients as part of a study to see if the product worked. There are many ways to conduct studies. However, if the people doing the study don't follow strict scientific rules for doing research, the study results may have little meaning.

Good science: what to look for

Scientific studies require careful planning. Researchers need to follow specific procedures and processes. Studies must follow certain rules to be considered scientifically credible, including the following:

- The testing must take place in carefully **controlled conditions**. Researchers have to make sure to control factors that could affect the results. For example, if researchers want to know how a medicine affects a child, they have to make sure the child isn't taking any other medicines at the same time.
- Researchers need to determine how many people should be included in the study. **Study size** varies according to the kind of study and number of people needed to demonstrate an effect.
- The group of people receiving treatment should be compared to a **control group** to truly test if the treatment as any effect. A control group doesn't receive the new treatment, but instead may be given a placebo (sugar pill) an alternative treatment.

- Good clinical studies should be replicated. That means other researchers should be able to do the same study
 again using different subjects and get similar results. We know we can trust the findings when different studies
 come to the same conclusions.
- Well-done, scientifically sound studies should go through **peer review**. This means other experts on the topic being studied should review each study and make sure that all proper scientific standards were met.

Questioning your sources

Ask these questions when evaluating a health information:

1. What is the source?

In general, sources you can trust include accredited medical schools, government agencies, professional medical associations, and recognized national disorder/disease-specific organizations. However, don't rely mainly on the name of the organization—do your own research.

The last 3 letters in a website address can tell you what type of organization or company set up the site.

- .gov—Government websites often provide large amounts of information for the general public.
- .org—Nonprofit organization websites may contain useful information. However, not all organizations put out
 reliable materials. Search for information on nonprofit websites that you have heard of and have good
 reputations.
- .edu—Academic or education-based websites may have educational materials for parents.
- .com—Commercial websites often are designed to sell you something. They are not necessarily a source of reliable information.

2. Who is the expert?

The doctors or researchers being interviewed may sound like experts, but what are their credentials? What expertise and experience do they have? They may be doctors, but are they experts on the particular issue being talked about? Are there conflicts of interest? Are they working for a company that may benefit from their "expert" support? Are they being paid for their support of a product? If so, this could influence what information these experts choose to share.

3. What are the facts?

Know the difference between preliminary and confirmed findings. A "breakthrough" finding may seem promising. But it still needs to be replicated and reviewed over time. Don't let a headline make you think that "new study" is the same as "proven." Another word of caution: "new" doesn't mean improved. Sometimes newer medicines are not an improvement over older medicines and cost much more.

Evaluating new treatments or medicines

When you come across a new treatment (/English/health-issues/conditions/treatments/Pages/default.aspx) or medicine, ask yourself the following questions:

1. Will it work for my child?

Be suspicious if the information describing the treatment or medicine:

- · Claims it will work for everyone.
- Uses a story about one person's experience or testimonials as proof that it works.
- Cites only one study as proof.
- Cites a study without a control (comparison) group.

2. How safe is it?

Be suspicious if the treatment or medicine:

- Comes without directions for proper use.
 - esn't list contents or ingredients.
 - Has no information or warnings about side effects.

- Is described as "harmless" or "natural." Remember, most medication is made from natural sources. A "natural" treatment doesn't necessarily work and, worse yet, actually may be harmful to your child. Being "natural" does not necessarily mean it is good or safe.
- Isn't approved by the Food and Drug Administration (FDA).
- · Appears on an infomercial.

3. How is it promoted?

Be suspicious if the ad for the treatment or medicine:

- · Claims it's based on a secret formula.
- Claims it works immediately and permanently.
- Claims it's a "miraculous" or an "amazing" breakthrough.
- Claims it is a "cure."
- Says it's available from only one source.

Remember

The internet can be a valuable source of medical information and advice, but you can't trust everything you read. The internet also is the source of a lot of health-related theories and opinions that haven't been proven.

Make sure that your pediatrician (/English/ages-stages/prenatal/decisions-to-make/Pages/finding-a-pediatrician.aspx) knows about your questions and concerns; share the information you've found. You and your pediatrician are partners in your child's health.

More information

• 5 Unhealthy Ways Digital Ads May Be Targeting Your Child (/English/family-life/Media/Pages/5-Unhealthy-Ways-Digital-Ads-May-Be-Targeting-Your-Child.aspx)

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