

How to Identify High-Quality Health Information Online

iCON Digital Health Literacy, 2022



Acknowledgements

This digital health literacy curriculum was developed by The University of British Columbia's interCultural Online health Network (iCON).

iCON is supported by the B.C. Ministry of Health's *Patients as Partners* initiative.

iCON has been working with multicultural communities for over 10 years.

iCON helps people with chronic disease self-management.

iCON also helps people develop digital literacy in order to access, assess, and use health resources online.



THE UNIVERSITY OF BRITISH COLUMBIA

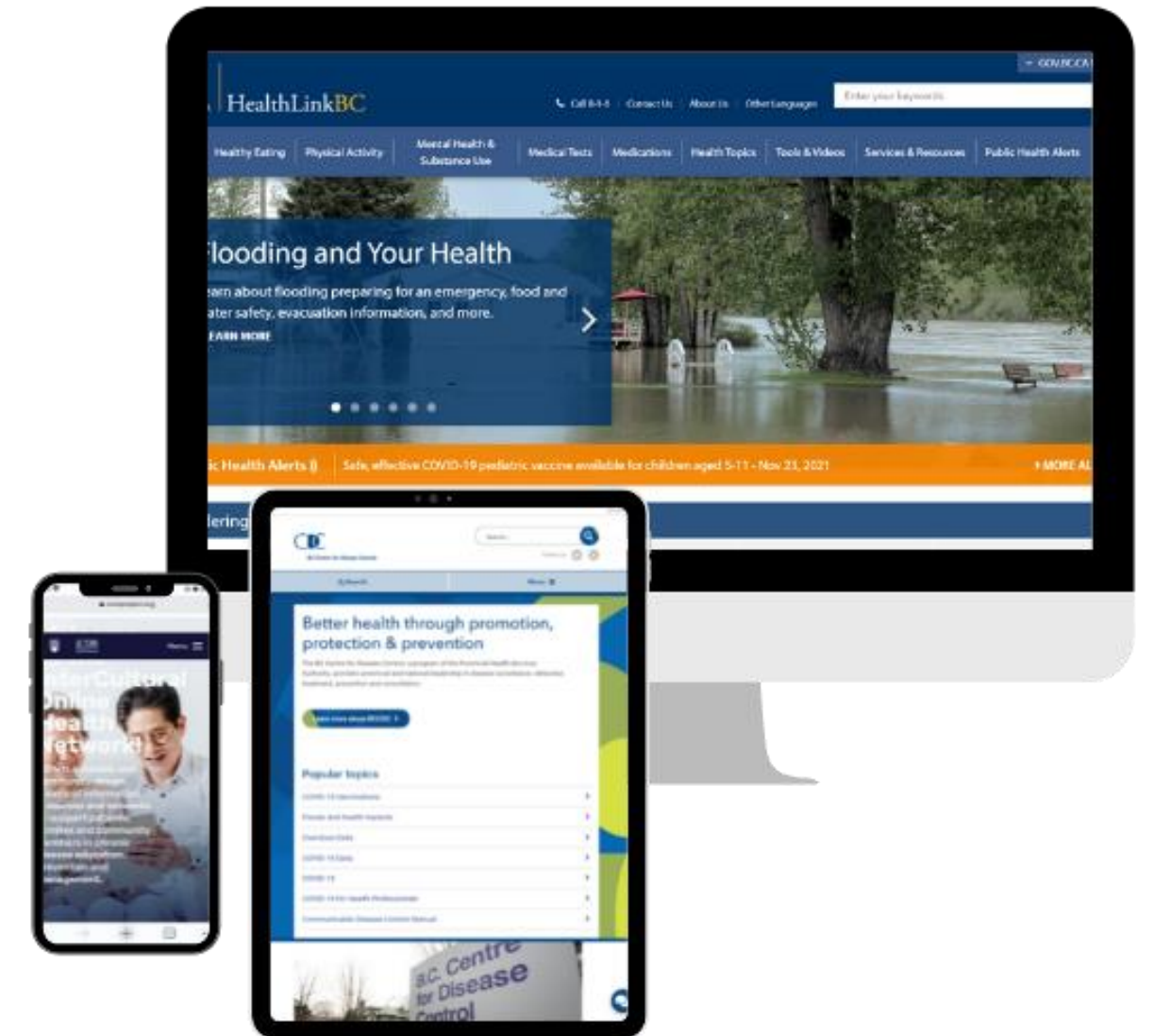
Department of Emergency Medicine

Faculty of Medicine

Thank you to the BC Ministry of Health Patients as Partners Initiative for their support.

Webinar outline:

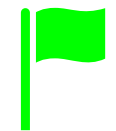



- More Reliable (Higher Quality) and Less Reliable (Lower Quality) Healthcare Information
- How to Find More Reliable Healthcare Information Online
- Practice Finding More Reliable Healthcare Information
- Summary



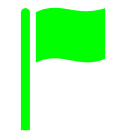



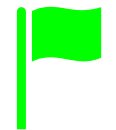

What are Green Flags and Red Flags ?

- Green Flags  are symbols that suggest the website is more reliable. 

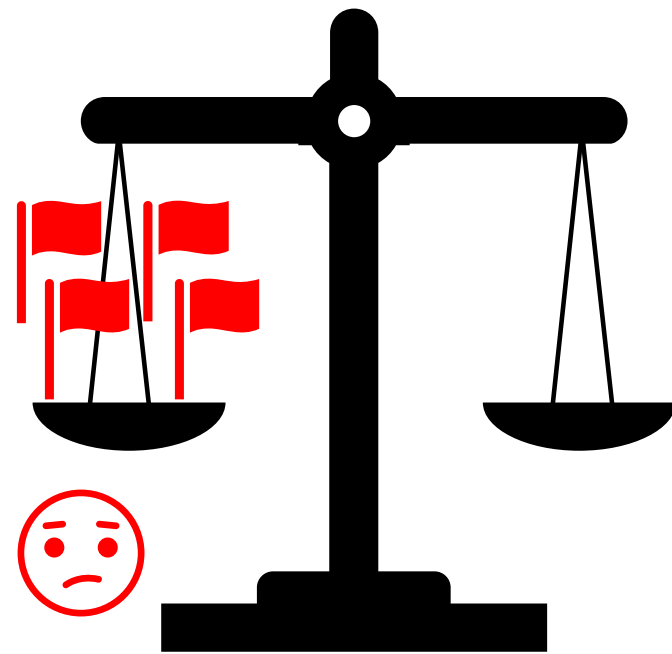
What are Green Flags and Red Flags ?

- Green Flags  are symbols that suggest the website is more reliable. 
- Red Flags  are symbols that suggest the website is less reliable. 

What are Green Flags and Red Flags ?

- Green Flags  are symbols that suggest the website is more reliable. 
- Red Flags  are symbols that suggest the website is less reliable. 
- Some websites may have some Green Flags  and some Red Flags .

What are Green Flags and Red Flags ?



Less reliable



May or may not
be reliable



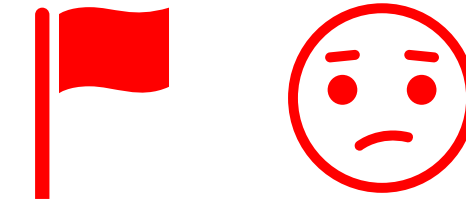
More Reliable

Green Flags  : more reliable. 

Red Flags  : less reliable. 

More Reliable and Less Reliable Online Healthcare Information


More Reliable and Less Reliable Online Healthcare Information



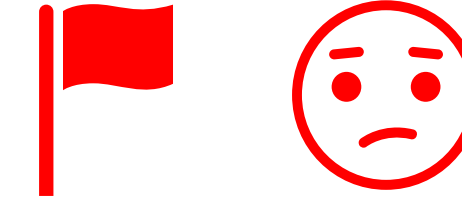
More Reliable Information:

- Tries to educate and share accurate information. 



Less Reliable Information:

- Tries to get money or sell products. 



More Reliable and Less Reliable Online Healthcare Information



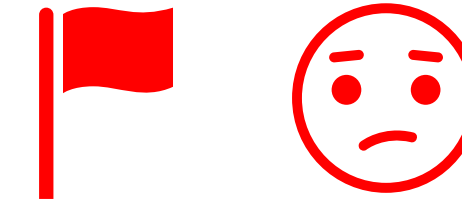
More Reliable Information:

- Tries to educate and share accurate information. 
- Is from experts, and is checked by other experts. 




Less Reliable Information:

- Tries to get money or sell products. 
- Is not from experts, and is not checked by other experts. 




More Reliable and Less Reliable Online Healthcare Information



More Reliable Information:

- Tries to educate and share accurate information. 
- Is from experts, and is checked by other experts. 
- Is current and up to date. 

Less Reliable Information:

- Tries to get money or sell products. 
- Is not from experts, and is not checked by other experts. 
- Is not up to date and may have incorrect information. 

How to Find More Reliable Health Information Online

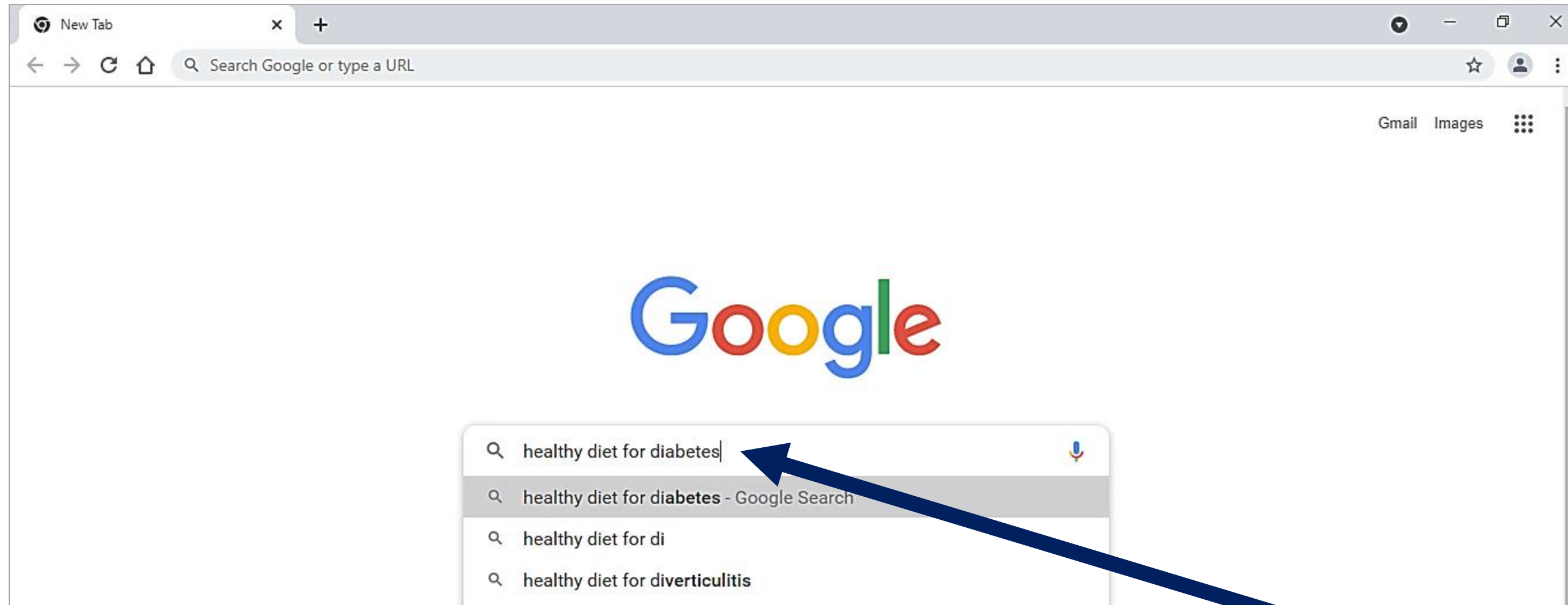


It is important to learn how to find more reliable health information online, such as for self-management of conditions including:

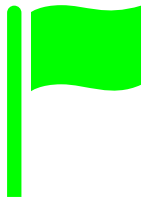

- Bone Disease
- Dementia
- Diabetes
- Heart Disease
- Liver Disease
- Mental Wellness
- Stroke





To start, use a search engine to find information.



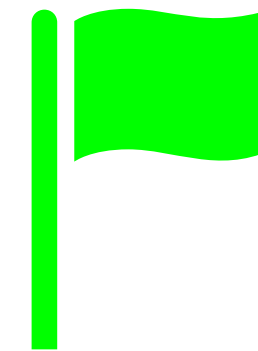
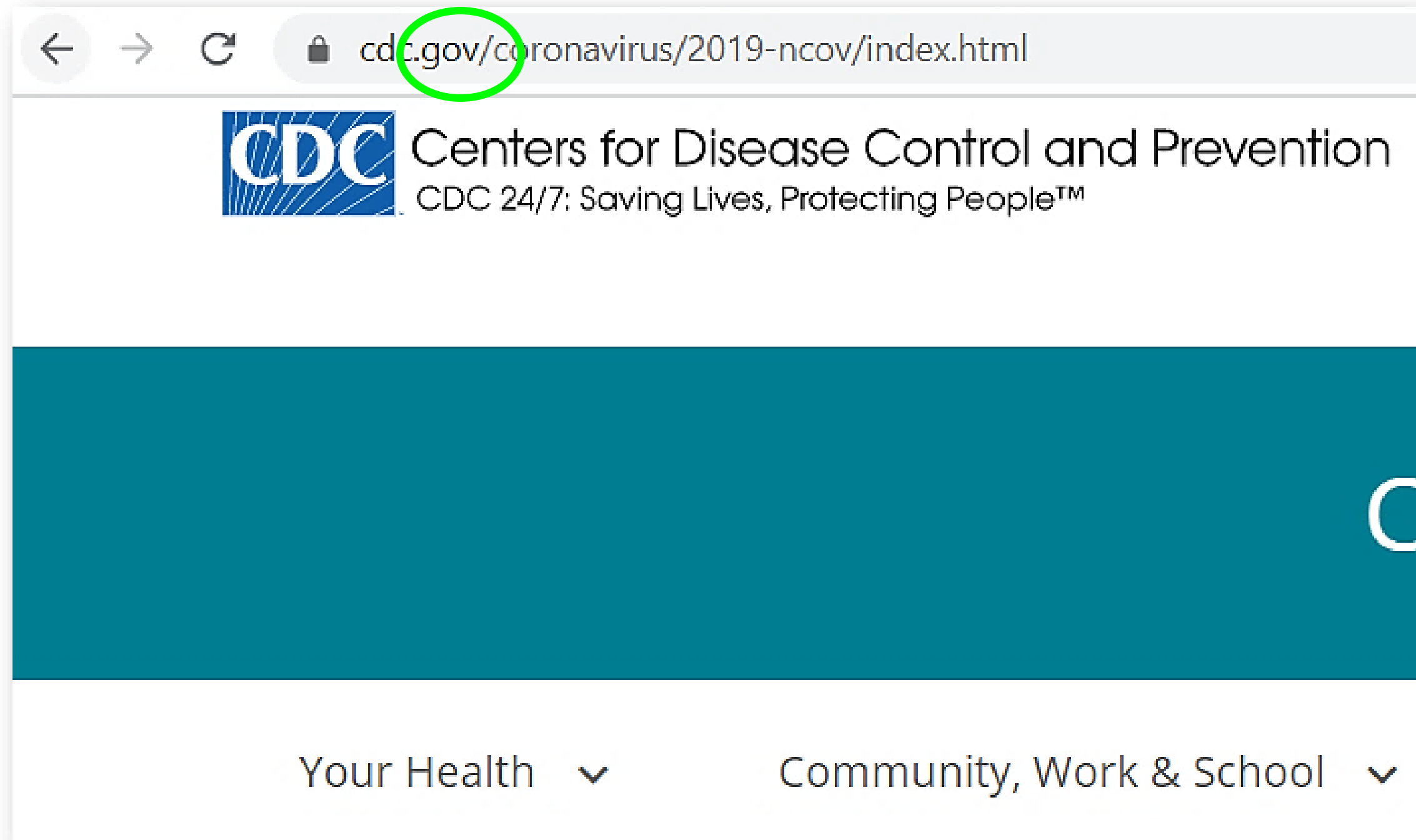
Websites with these endings might be more reliable:

-   website.gov = government information
- website.org = usually a not-for-profit organization
- website.edu = an educational institution such as a university

Websites with this ending might be less reliable:

-   website.com = a commercial business

This is a government website.



This website is an organization.



This website is also an organization.



This website is sharing reliable online health information.

<https://www.cdc.gov/flu/index.htm>



• .gov

This website is educating people.

It answers your questions about the flu.

There are no advertisements.

This web page has a date. It is current and up to date.



More information

[Travelers](#)

[Businesses](#)

[Households](#)

[Healthcare Professionals](#)

[People Who Need Extra Precautions](#)

[Health Departments](#)

[People Who Are Sick](#)

[Laboratories](#)

[Caregivers](#)

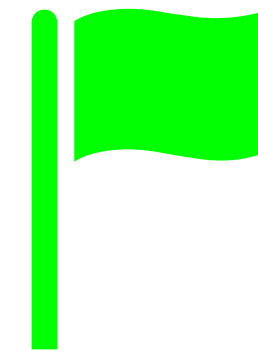
[ASL Video Series: Use the Coronavirus Self Checker](#)

[Schools](#)

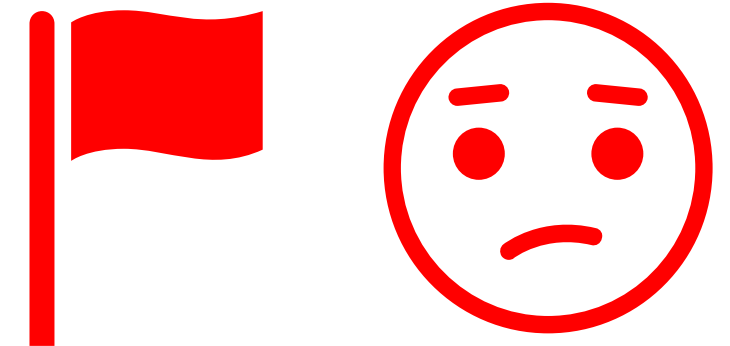
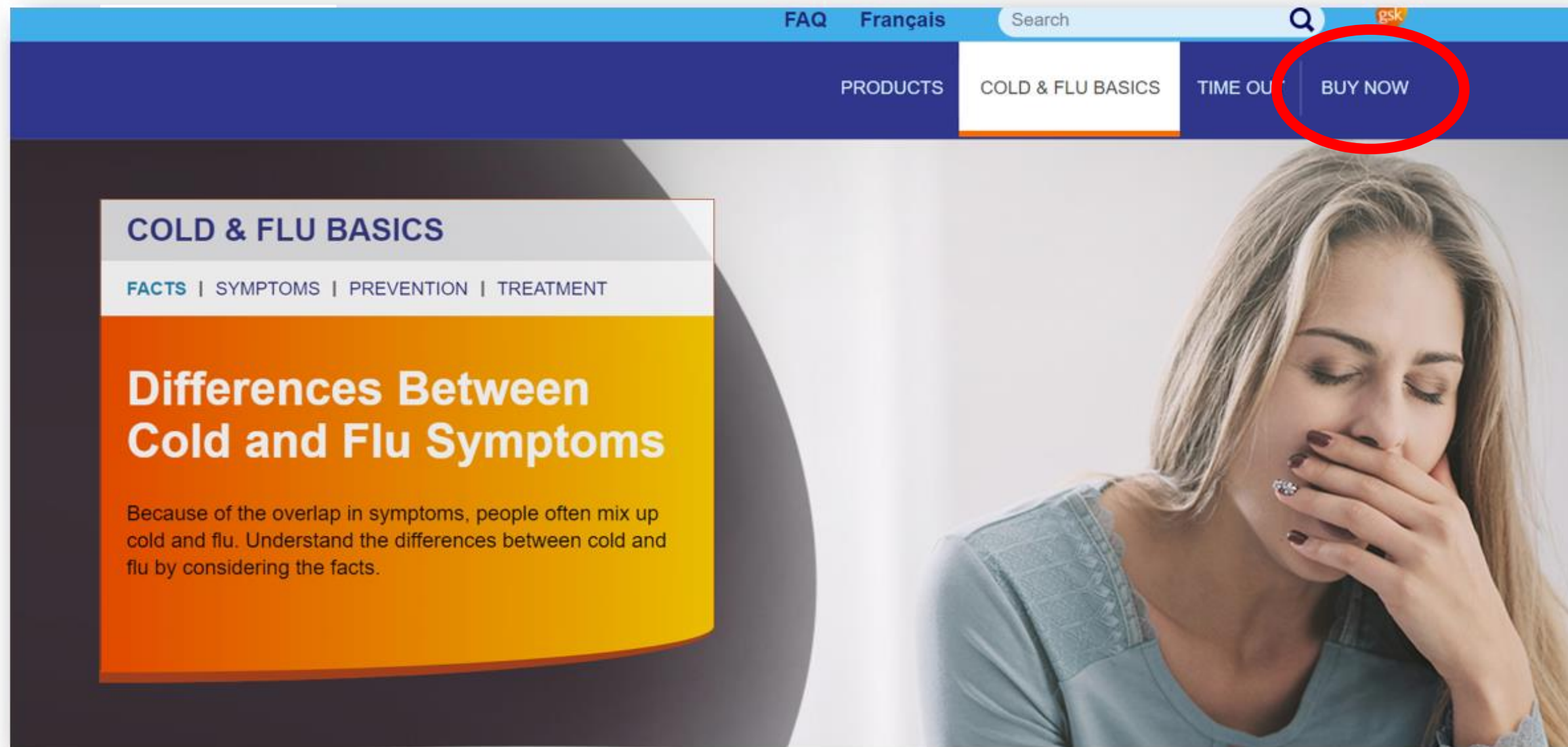
[Top of Page](#)

Page last reviewed: May 8, 2020

Content source: National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases



This website is for a business. They are selling a product, with an option to “Buy Now”.



This website is for a business. It is asking for your credit card information, and asking for money.

The screenshot shows a medical website with a sign-up form and a rewards pop-up. The sign-up form includes fields for email address, credit card number, expiration date, CVV, and ZIP code, with a prominent red circle around the credit card information. A red flag and a sad face icon are overlaid on the right side of the image, indicating a warning or concern.

Doctors & Specialists

Join for **CA\$5** and get your answer in minutes

Unlimited conversations 24/7 days for just CA\$5. Then CA\$66/month. Cancel anytime.

Email address
example@email.com

Credit card number
0000 0000 0000 0000

Expiration MM / YY CVV 12345 ZIP / Postal code 12345

Start your trial now

Cancel anytime. We'll remind you before your trial ends.
By clicking "Start your trial now" you agree to the Terms of Service, Privacy Policy and are 18+ years old. Your information is secure.

9 General Practitioners are online now

Dr. David, MD
General Practitioner
34,715 Satisfied Customers

Membership Benefits:

- Get answers from doctors in minutes, 24/7
- Save time and money vs. in-person appointments
- More than medical: lawyers, vets, tech support, and 12,000 verified Experts

Rewards available!

Rewards Rate 1 to 10%

Claim Rewards

TRY LATER

These are ads. The website is trying to make money.

The screenshot shows a webpage with the title "What Is Glioblastoma?". The main text discusses radiation and chemotherapy treatments. Several areas are circled in red to highlight advertisements: a vertical column of clothing items on the left, a large horizontal banner for "Sigma-Aldrich Supelco" in the middle, and a "SPONSORED ADS" section at the bottom containing a list of health-related products.

What Is Glioblastoma?

remove all of it.

Radiation is used to kill as many leftover tumor cells as possible after surgery. It can also slow the growth of tumors that can't be removed by surgery.

Chemotherapy may also help. Temozolomide is the most common chemotherapy drug doctors use for glioblastoma. Carmustine (BCNU) and lomustine (CCNU) are other chemotherapy drugs that might be used.

SPONSORED ADS

1 Best Mouthwash for Gum Disease	4 Best Vitamins for Hair Growth
2 Dietary Fiber for Constipation	5 Best Moisturizers for Aging Skin
3 Top Probiotics for Gut Health	6 Best Mattress for Lower Back Pain



Does the website answer your question?



why can't i lose weight



All

Images

Videos

News

Shopping

More

Tools

About 5,790,000,000 results (0.68 seconds)

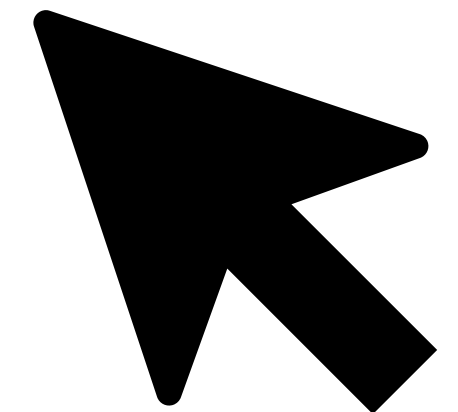
Website.Me Official Website | Hack Your Metabolism

<https://www.website.me>

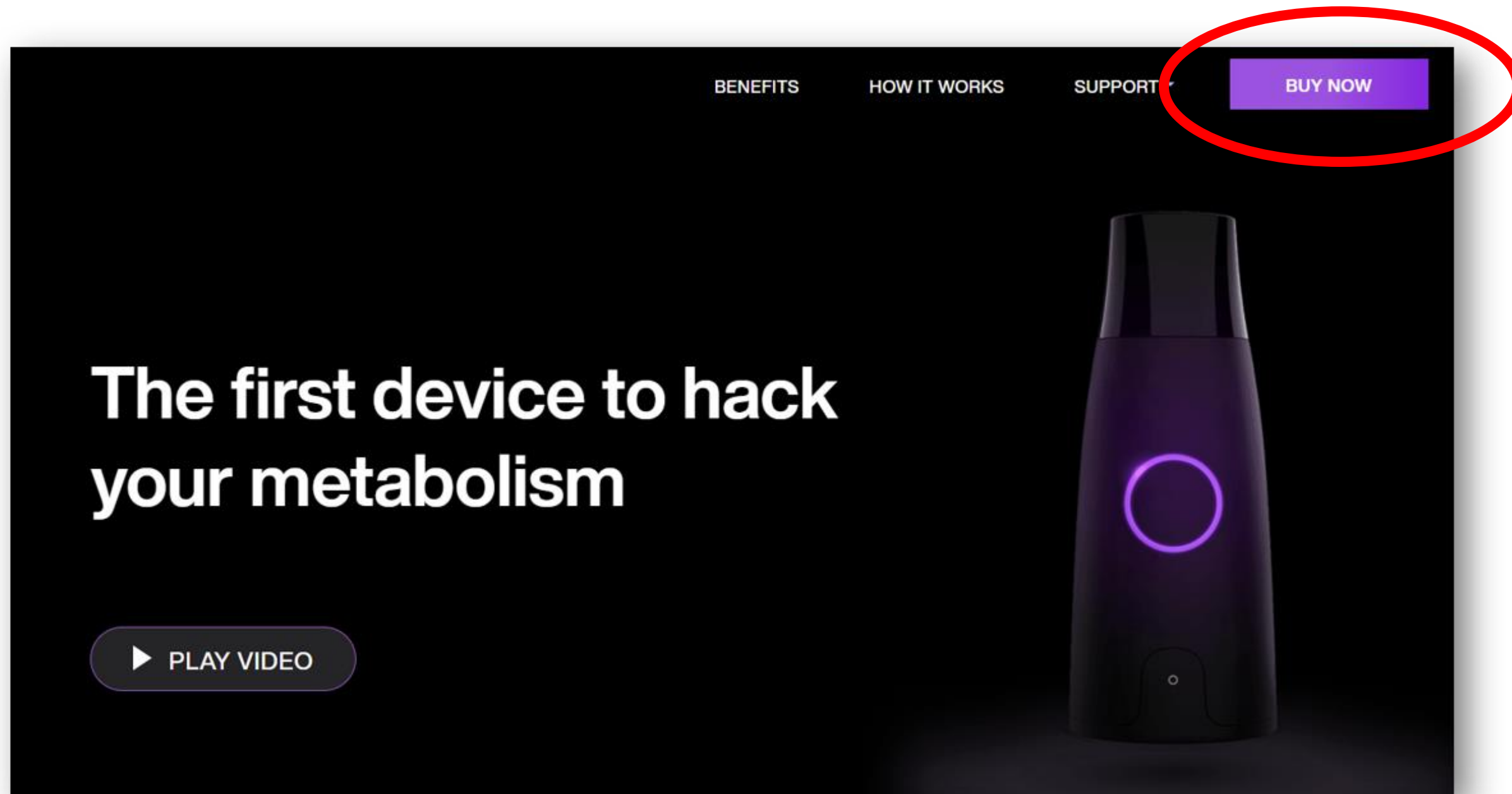
(Ad) The First Device To Hack Your Metabolism. We Knows If Your Body Is Using Fats Or Carbs For Fuel.

Fast Shipping & Delivery · 5 Star Reviews · Exclusive Deals · Download Mobile App

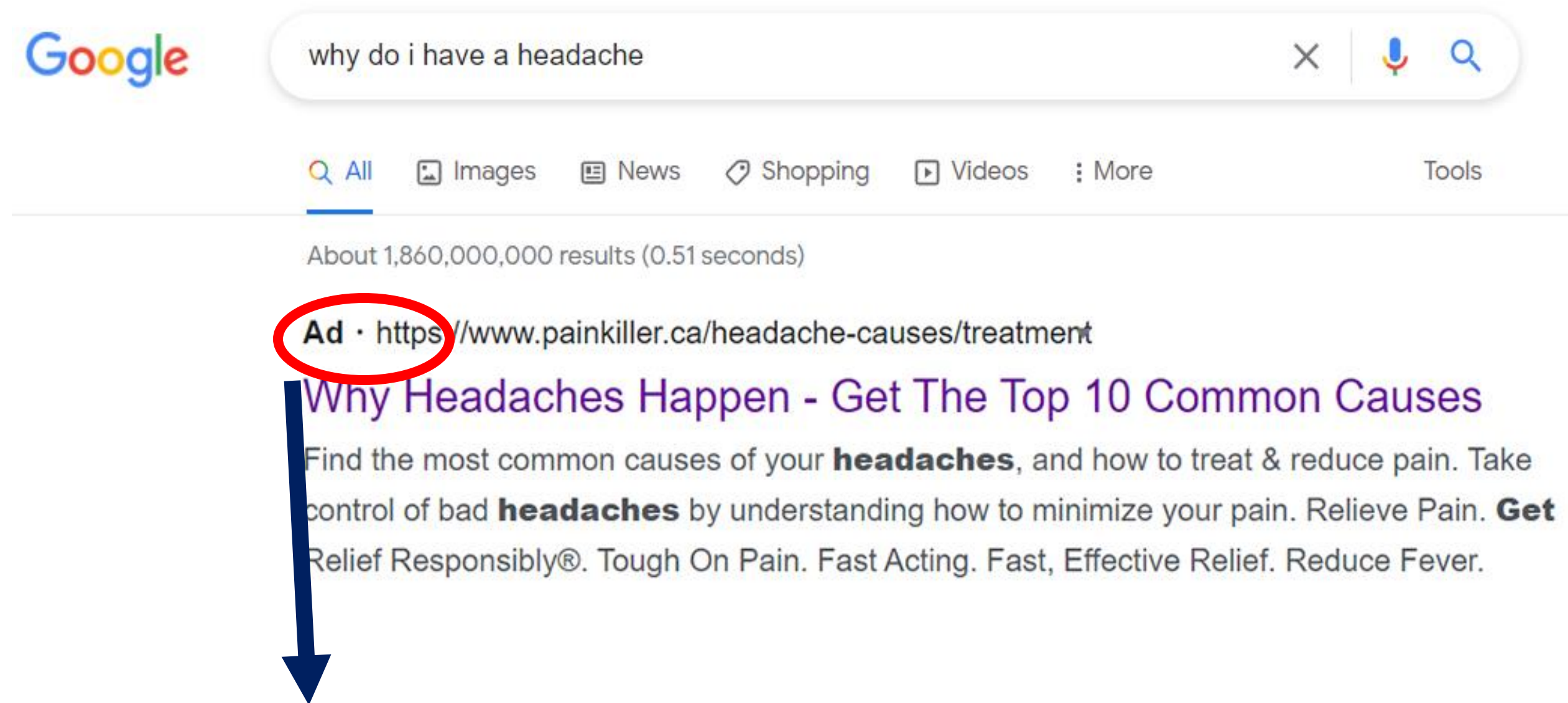
Service Catalog: **Weight** Loss, BENEFITS, SCIENCE, Corporate Wellness and more



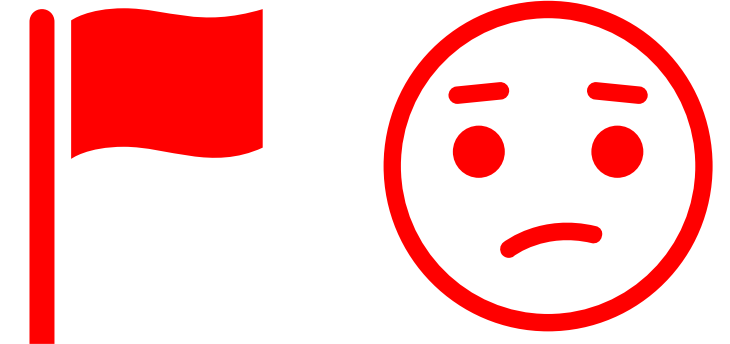
This website is a business. It does not answer your question. It is selling a product.



Sometimes Google will label ads.

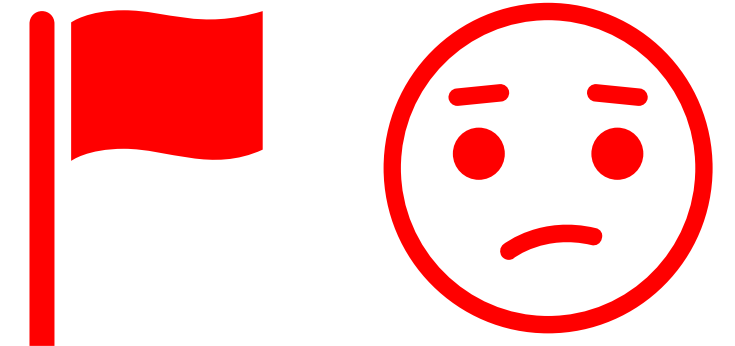


The image shows a Google search interface. The search bar contains the text "why do i have a headache". Below the search bar, there are navigation options: "All", "Images", "News", "Shopping", "Videos", "More", and "Tools". The search results show "About 1,860,000,000 results (0.51 seconds)". The first result is an advertisement, labeled "Ad" in a red circle. The URL is "https://www.painkiller.ca/headache-causes/treatment". The title is "Why Headaches Happen - Get The Top 10 Common Causes". The description reads: "Find the most common causes of your **headaches**, and how to treat & reduce pain. Take control of bad **headaches** by understanding how to minimize your pain. Relieve Pain. **Get Relief Responsibly®**. Tough On Pain. Fast Acting. Fast, Effective Relief. Reduce Fever." A blue arrow points from the "Ad" label to the text "x This is an advertisement." below the search results.

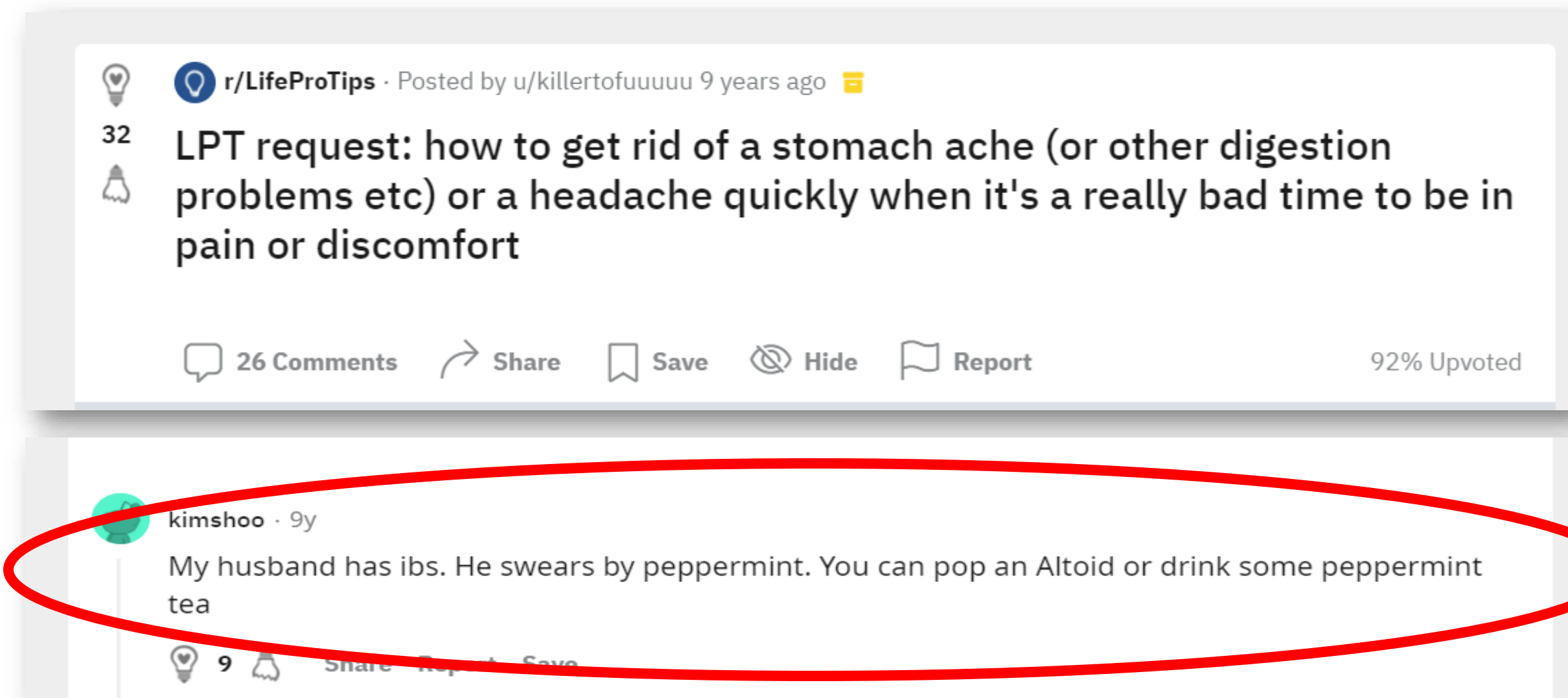


x This is an advertisement.

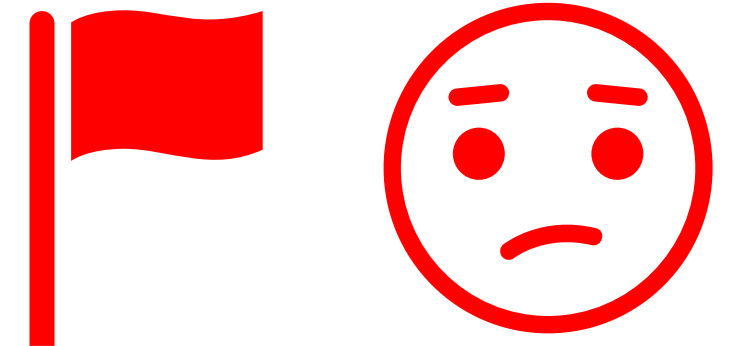
Information from experts does not have spelling mistakes.



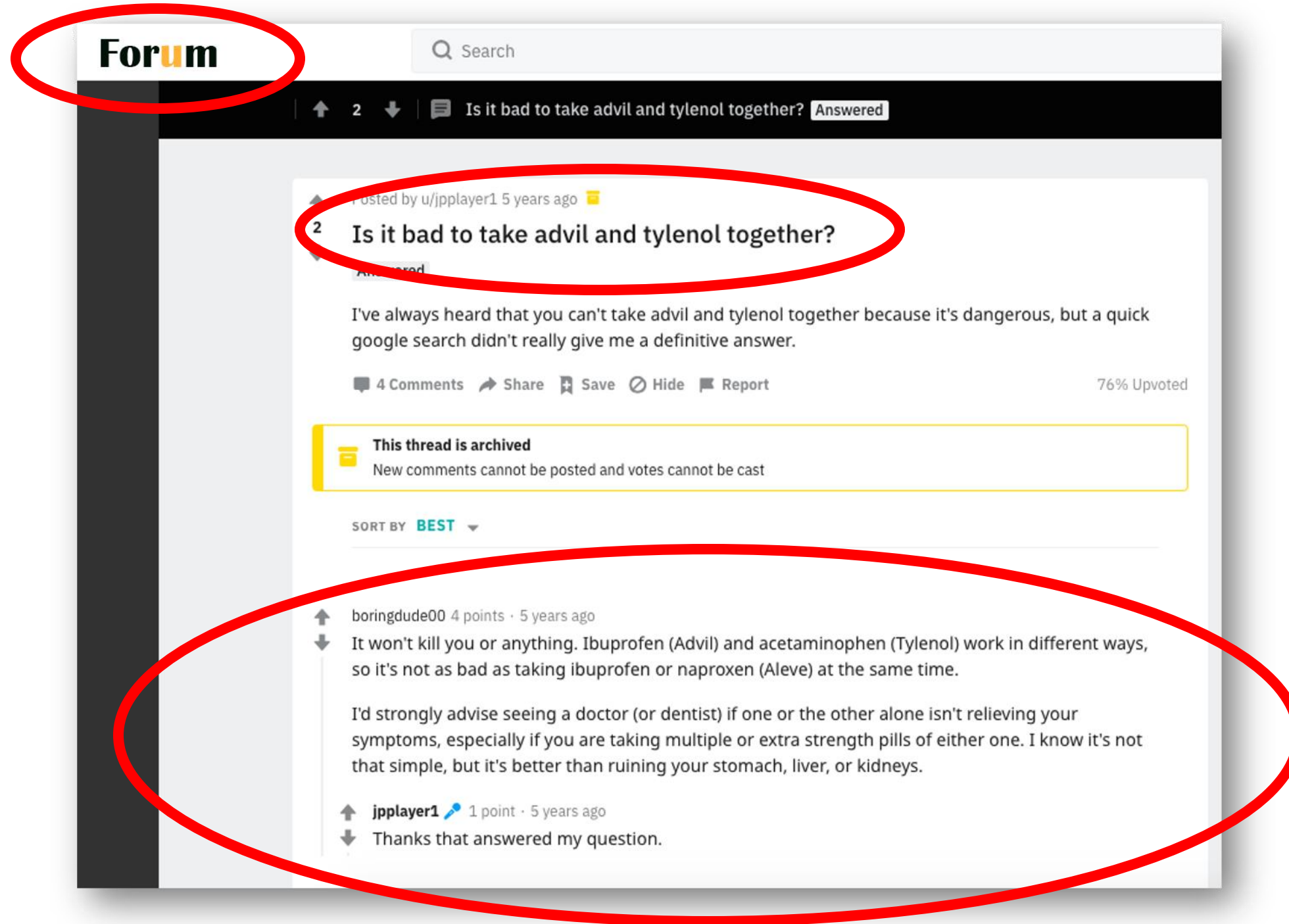
Most posts on forums are not from experts. Anyone (often not experts) can post an answer on a forum.



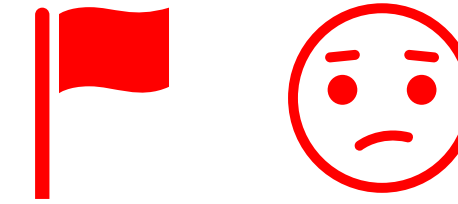
The image shows a screenshot of a forum post from the subreddit r/LifeProTips. The post is titled "LPT request: how to get rid of a stomach ache (or other digestion problems etc) or a headache quickly when it's a really bad time to be in pain or discomfort". It has 32 upvotes and 26 comments. The user "kimshoo" has responded with the text: "My husband has ibs. He swears by peppermint. You can pop an Altoid or drink some peppermint tea". A red oval highlights this response. The interface includes icons for comments, share, save, hide, and report, along with a "92% Upvoted" indicator.



This website is also a forum. Forums often have a question and answer format.



Review: More Reliable and Less Reliable Online Healthcare Information



More Reliable Information:

- Tries to educate and share accurate information.
- Is from experts, and is checked by other experts.
- Is current and up to date.
- Possible website endings: **website.gov**, **website.org**, **website.edu**

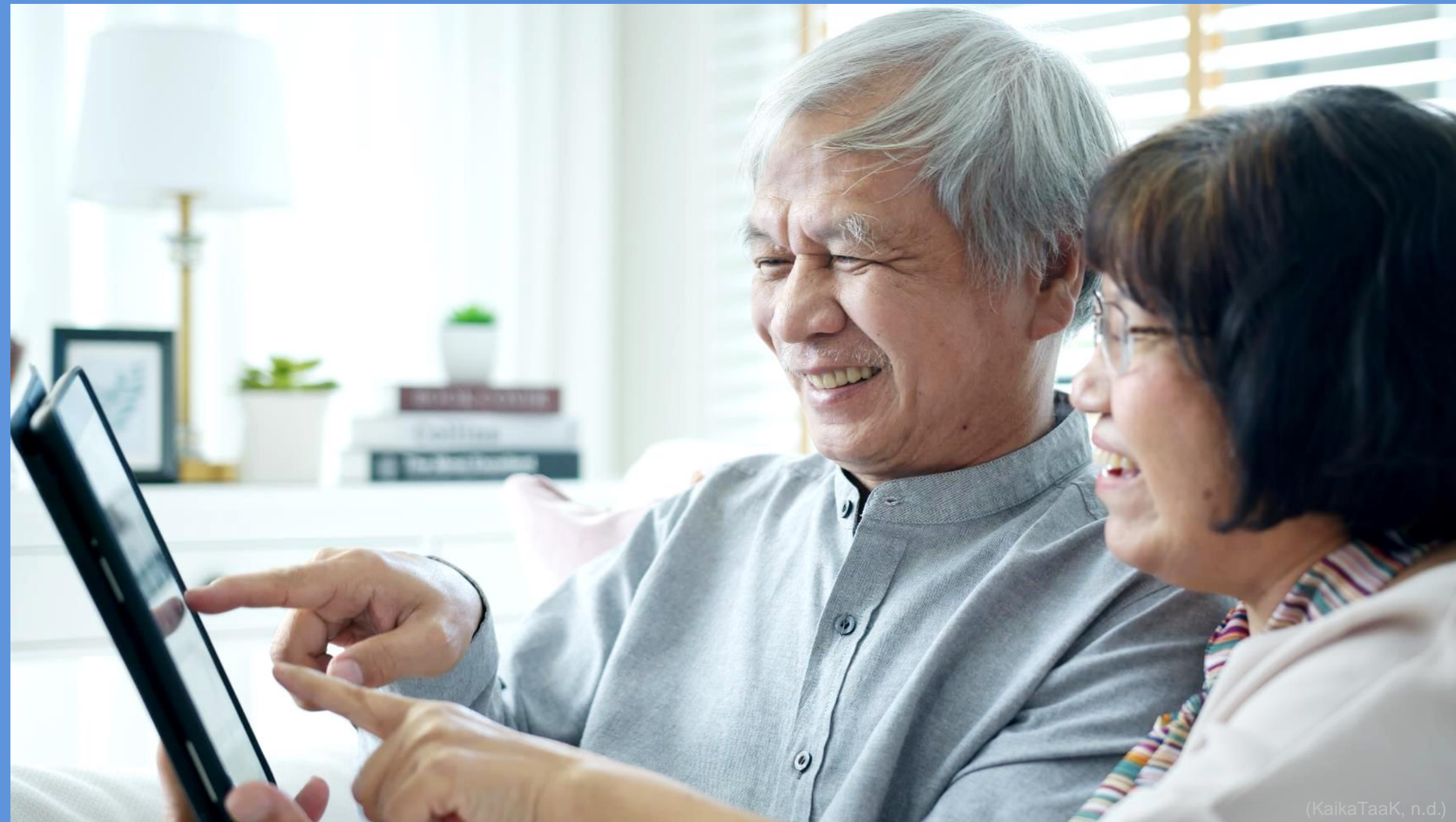


Less Reliable Information:

- Tries to get money or sell products.
- Is not from experts, and is not checked by other experts.
- Is not up to date and may have incorrect information.
- Possible website ending: **website.com**

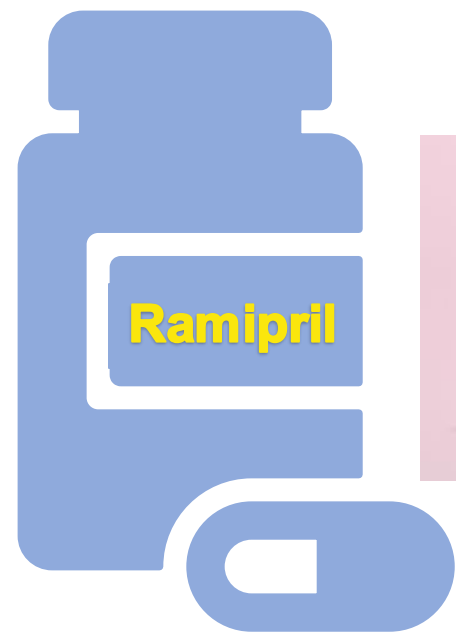


Practice Finding More Reliable Healthcare Information



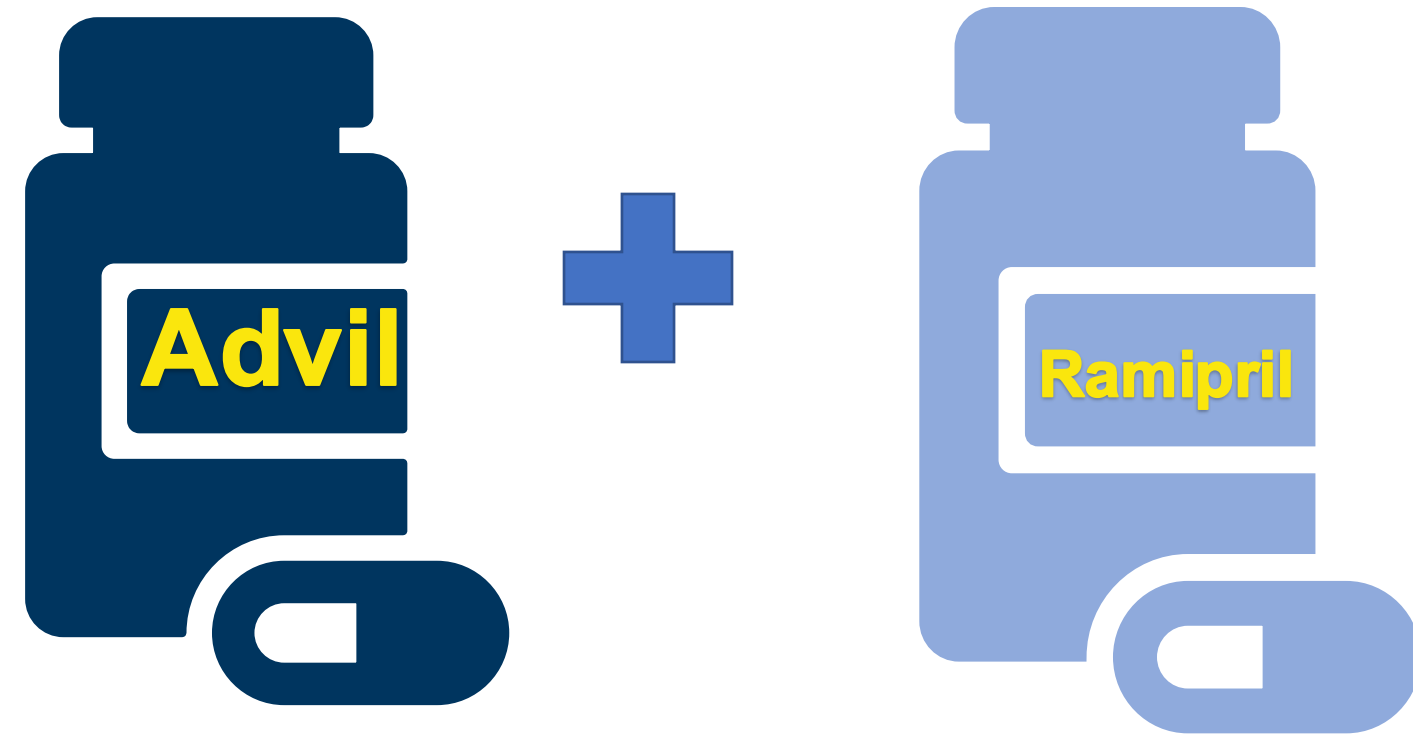
Example #1:

You take Ramipril for high blood pressure.

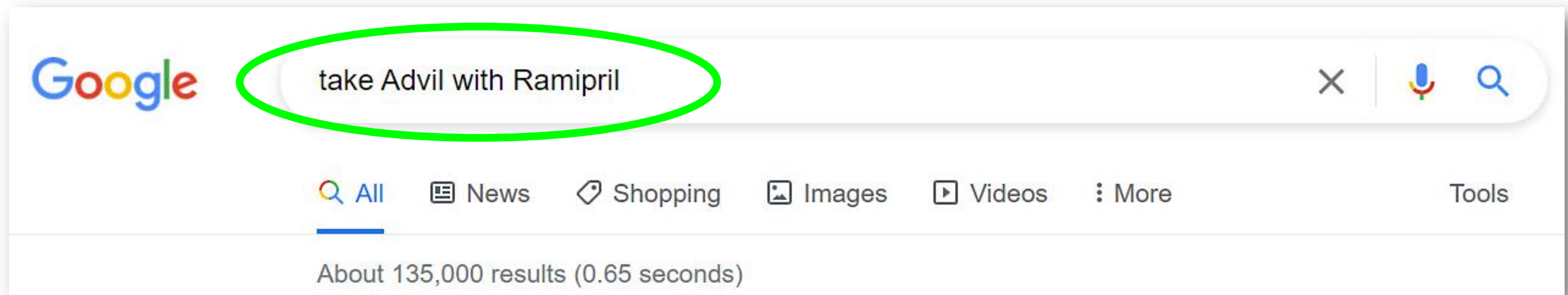


<https://elements.envato.com/red-white-color-capsules-medication-on-pink-backgr-SANN4SD>

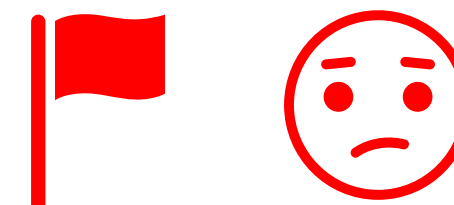
Can you take Advil and Ramipril together ?



Type the important words into a search bar.



Look For More Reliable Online Healthcare Information.



More Reliable Information:

- Tries to educate and share accurate information.
- Is from experts, and is checked by other experts.
- Is current and up to date.
- Possible website endings: **website.gov**, **website.org**, **website.edu**

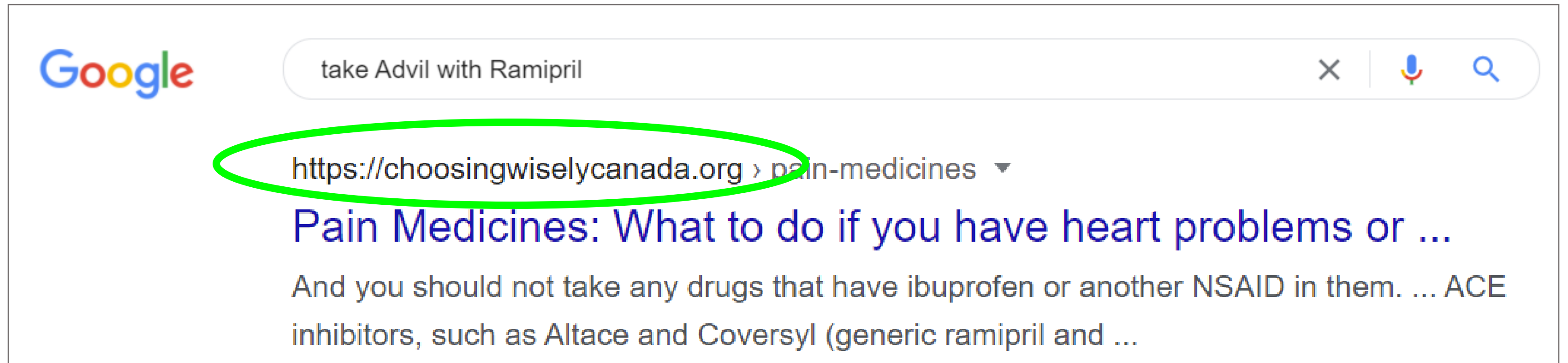


Less Reliable Information:

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- Is not from experts, and is not checked by other experts.
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- Possible website ending: **website.com**

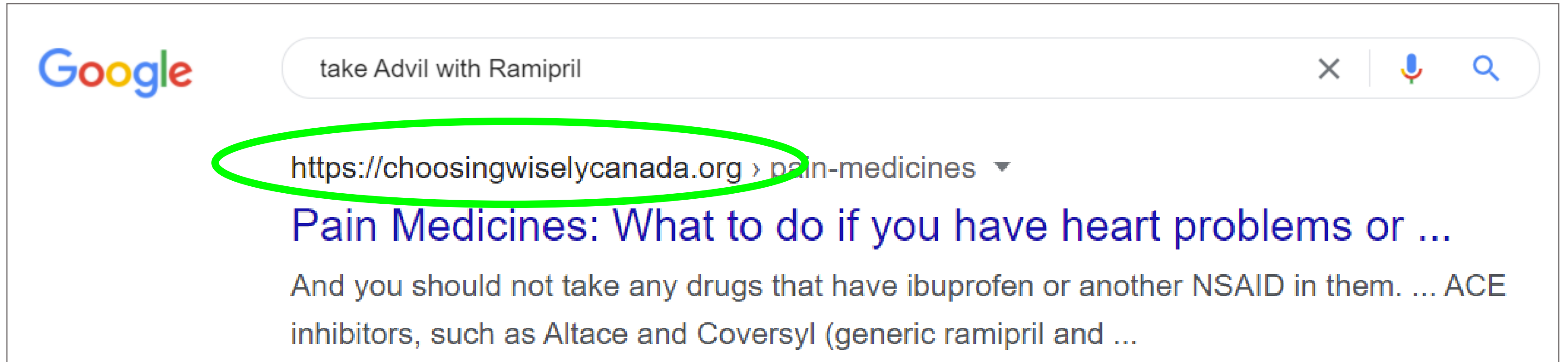


Look at the website ending. Is this a reliable website?



The image shows a Google search interface. The search bar contains the text "take Advil with Ramipril". Below the search bar, a search result is displayed. The URL "https://choosingwiselycanada.org" is circled in green. The title of the result is "Pain Medicines: What to do if you have heart problems or ...". The snippet below the title reads: "And you should not take any drugs that have ibuprofen or another NSAID in them. ... ACE inhibitors, such as Altace and Coversyl (generic ramipril and ...".

Look at the website ending. Is this a reliable website?

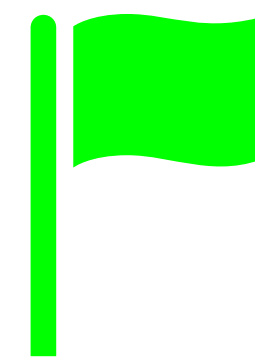


A screenshot of a Google search interface. The search bar contains the text "take Advil with Ramipril". Below the search bar, a search result is displayed. The URL "https://choosingwiselycanada.org" is circled in green. The title of the result is "Pain Medicines: What to do if you have heart problems or ...". The snippet below the title reads: "And you should not take any drugs that have ibuprofen or another NSAID in them. ... ACE inhibitors, such as Altace and Coversyl (generic ramipril and ...".

website.gov

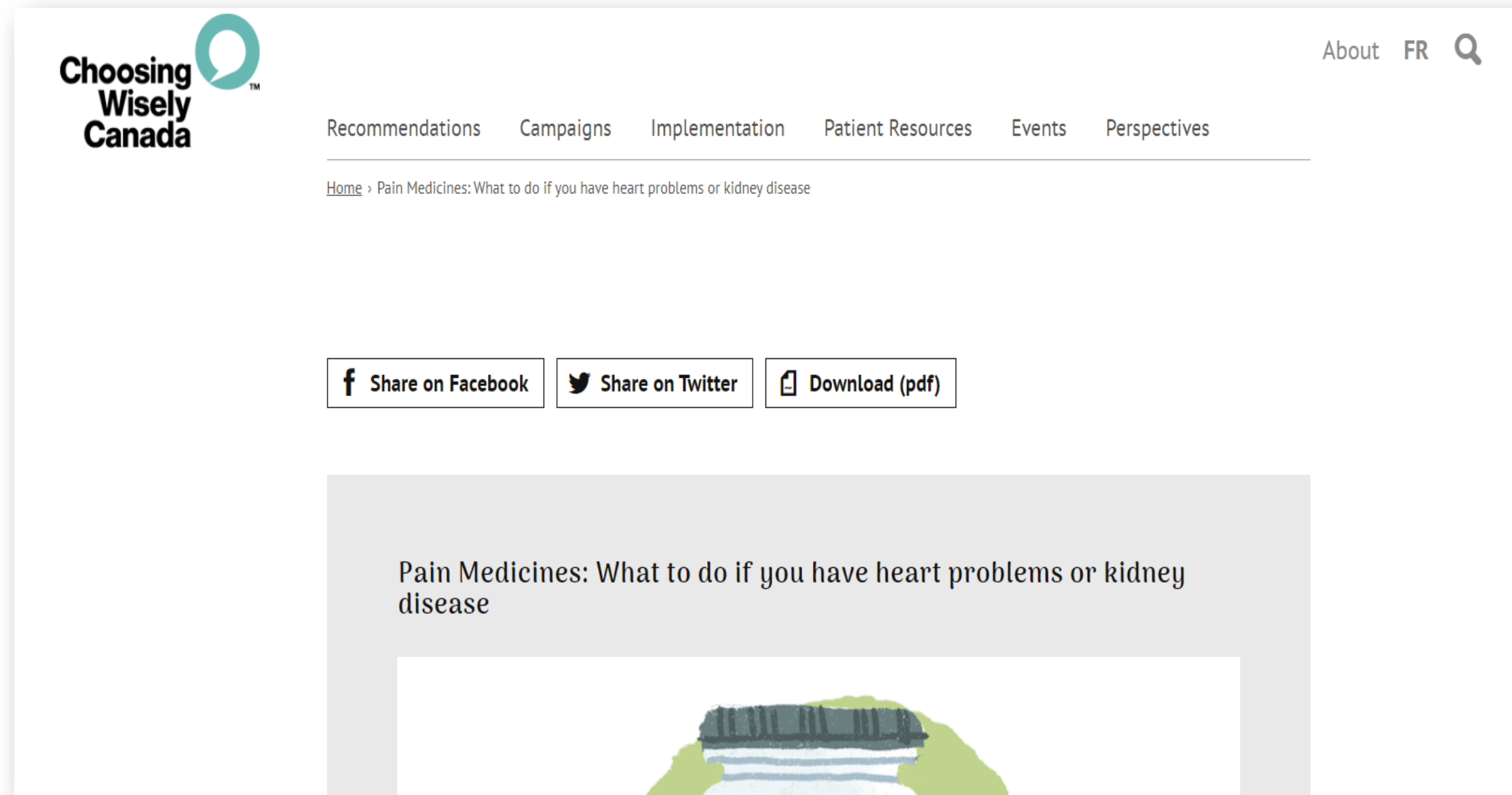
website.org

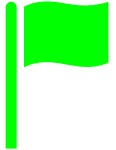
website.edu

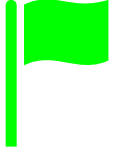


This website is sharing reliable online health information.

<https://choosingwiselycanada.org/pain-medicines/>

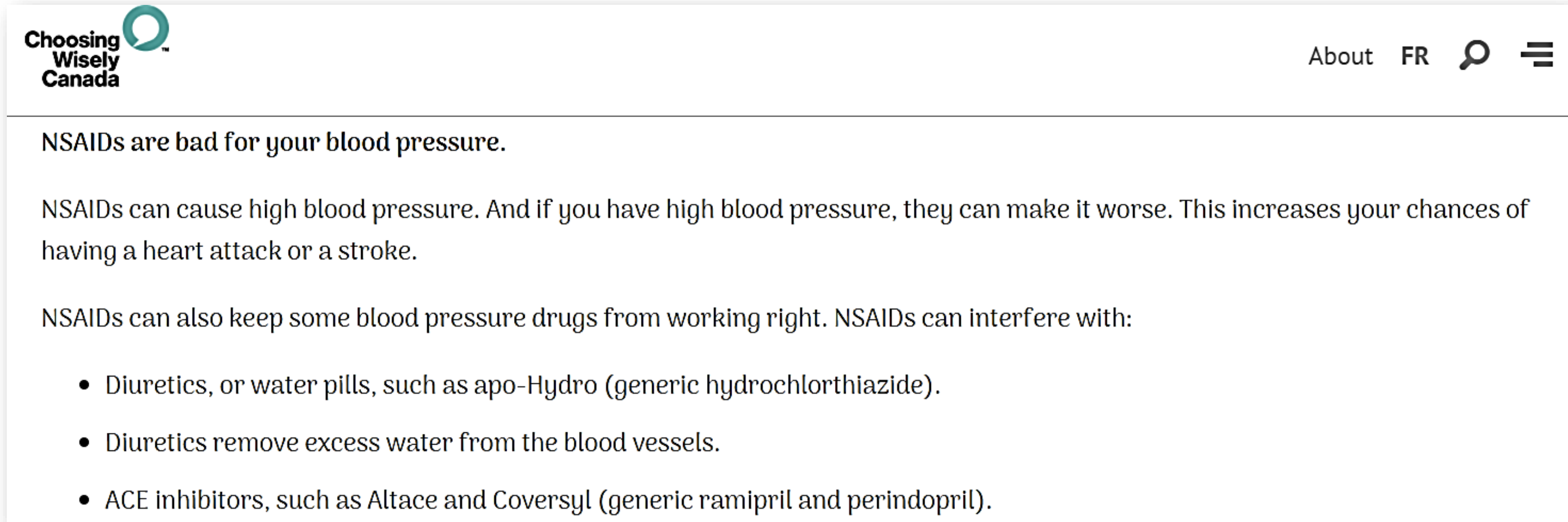



 .org



 No ads

 Not asking for payment

- 🚩 This website is educating us and answering our questions.
- 🚩 There are no grammar or spelling mistakes.



Choosing Wisely Canada 

About FR  

NSAIDs are bad for your blood pressure.

NSAIDs can cause high blood pressure. And if you have high blood pressure, they can make it worse. This increases your chances of having a heart attack or a stroke.

NSAIDs can also keep some blood pressure drugs from working right. NSAIDs can interfere with:

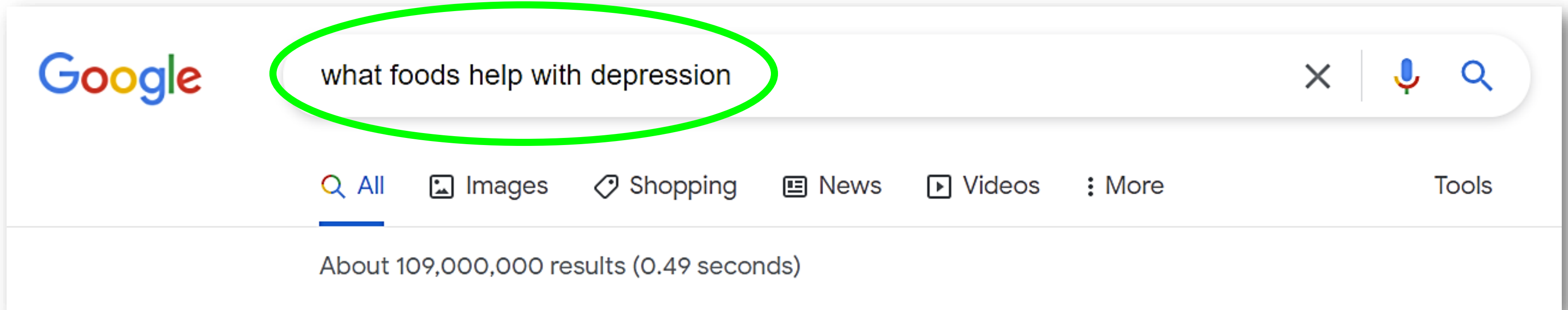
- Diuretics, or water pills, such as apo-Hydro (generic hydrochlorothiazide).
- Diuretics remove excess water from the blood vessels.
- ACE inhibitors, such as Altace and Coversyl (generic ramipril and perindopril).

Example # 2: You are depressed.

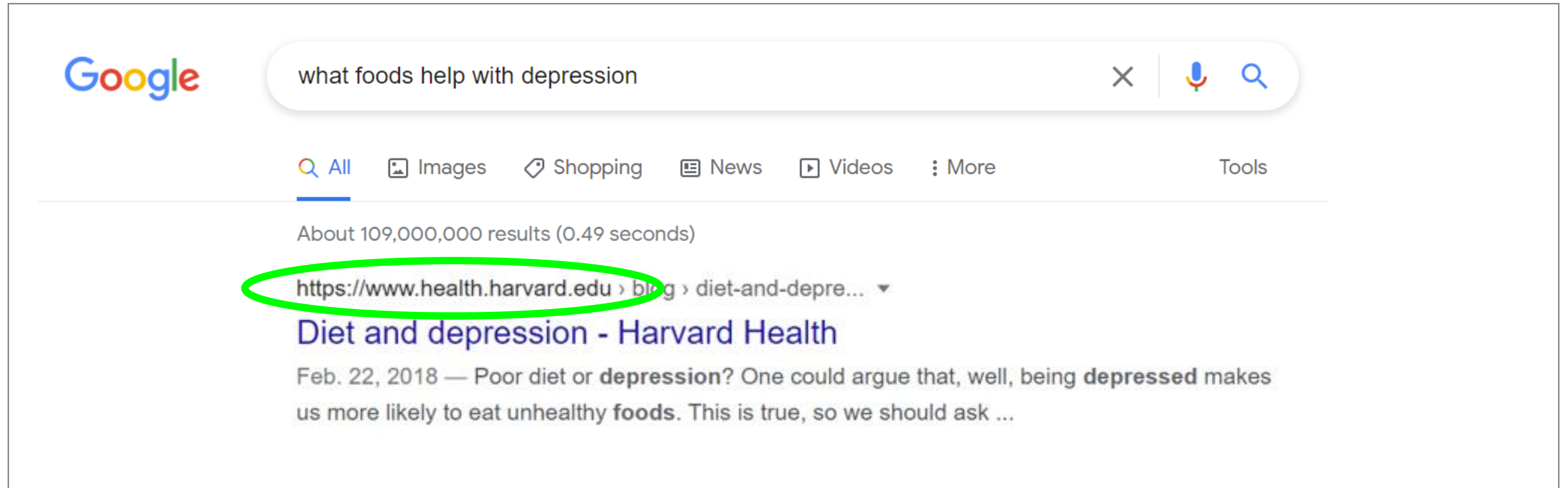
Can some foods help you feel better ?



Type the important words into a search bar.



Look at the website ending. Is this a reliable website?



The image shows a Google search interface. The search bar contains the text "what foods help with depression". Below the search bar, there are navigation options: "All", "Images", "Shopping", "News", "Videos", "More", and "Tools". The search results show "About 109,000,000 results (0.49 seconds)". The first result is from "https://www.health.harvard.edu > blog > diet-and-depre..." and is titled "Diet and depression - Harvard Health". The snippet below the title reads: "Feb. 22, 2018 — Poor diet or **depression**? One could argue that, well, being **depressed** makes us more likely to eat unhealthy **foods**. This is true, so we should ask ...". The URL "https://www.health.harvard.edu" is circled in green.

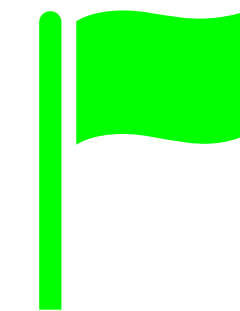
Look at the website ending. Is this a reliable website?

The screenshot shows a Google search interface. The search bar contains the text "what foods help with depression". Below the search bar, there are navigation tabs for "All", "Images", "Shopping", "News", "Videos", "More", and "Tools". The search results show "About 109,000,000 results (0.49 seconds)". The first result is from "https://www.health.harvard.edu > blog > diet-and-depre..." with the title "Diet and depression | Harvard Health". The date is "Feb. 22, 2018" and the snippet reads "Poor diet or depression? One could argue that, well, being depressed makes us more likely to eat unhealthy food. This is true, so we should ask ...". A green oval highlights the URL, and a blue arrow points from it to the "website.edu" label below.

website.gov

website.org

website.edu



Is this a reliable website?

Google

what foods help with depression

All Images Shopping News Videos More Tools

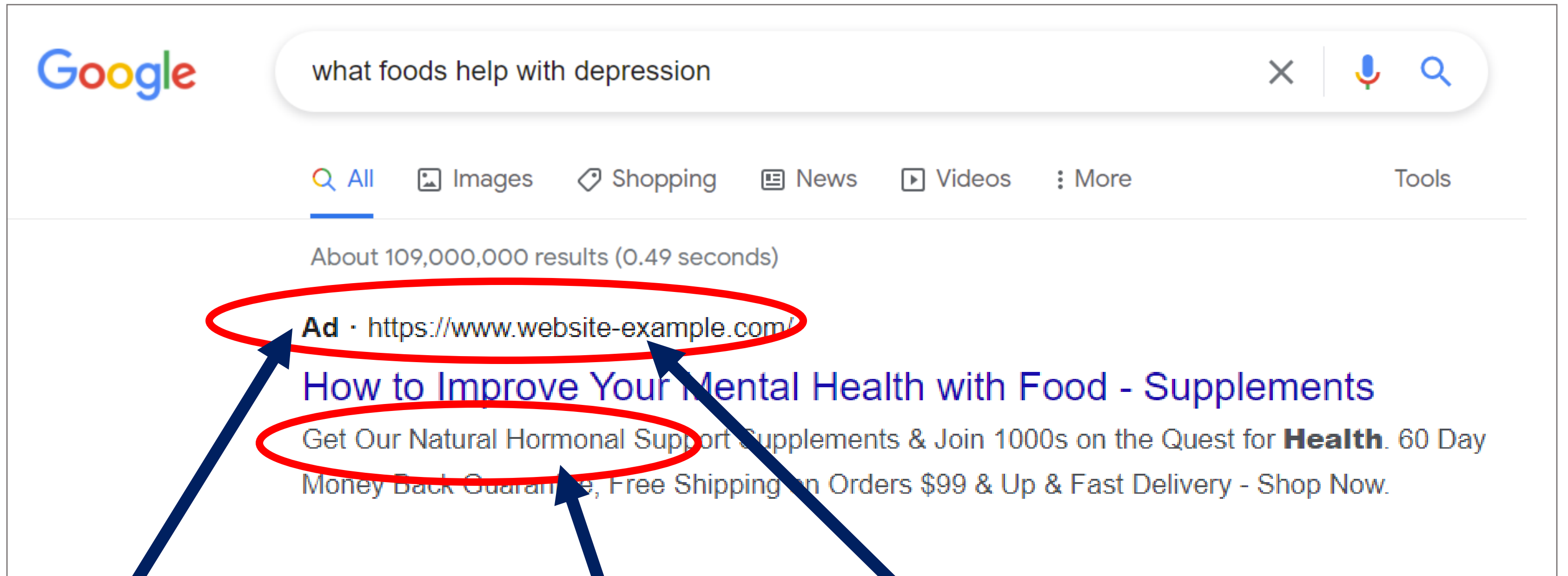
About 109,000,000 results (0.49 seconds)

Ad · <https://www.website-example.com/>

How to Improve Your Mental Health with Food - Supplements

Get Our Natural Hormonal Support Supplements & Join 1000s on the Quest for **Health**. 60 Day Money Back Guarantee, Free Shipping on Orders \$99 & Up & Fast Delivery - Shop Now.

Look at the website ending and Ad label. Is this a reliable website?



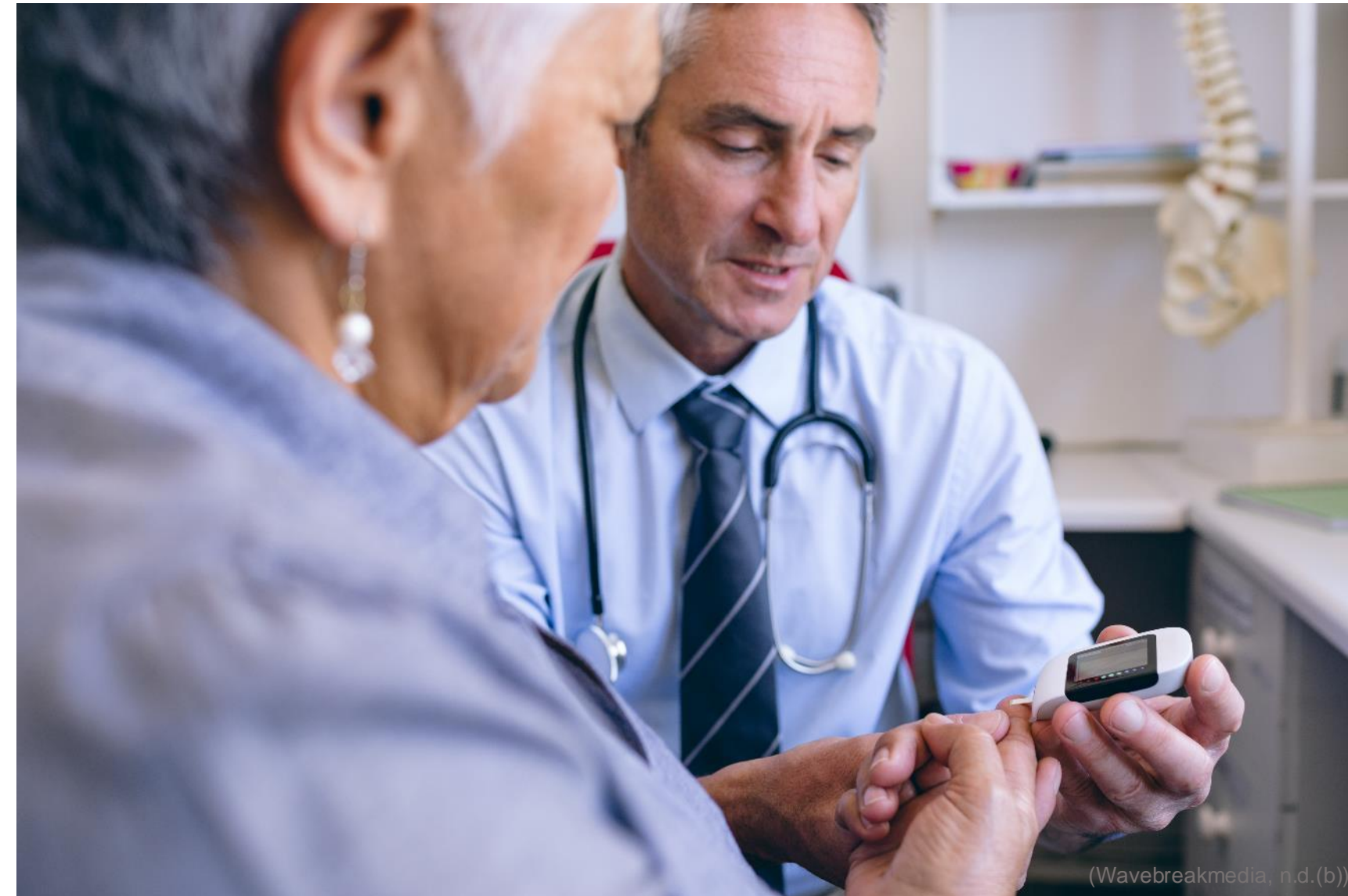
 Labelled as an Ad

 Selling supplements

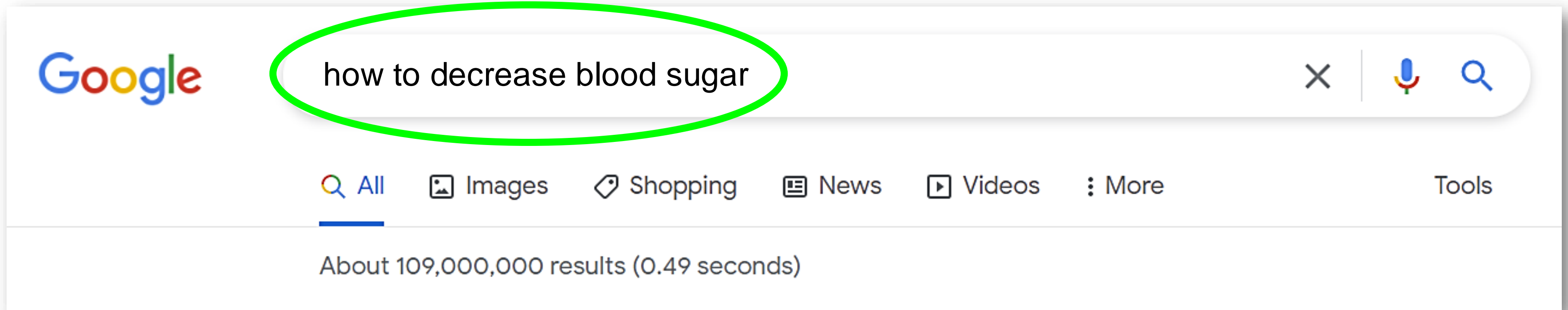
 .com



Example # 3: You are trying to lower your blood sugar.



Type the important words into a search bar.



This website is sharing less reliable online health information.

https://website-example.com/health/how-to-lower-blood-sugar

taking time to clear your mind and reduce stress will help your blood sugar.

2. Make like Popeye

You might not get super strength from spinach like Popeye does, but taking in some high-fiber foods can help bring down your blood sugar. A [1991 study](#) found that fruits, legumes, and other foods rich in water-soluble fiber helped balance blood sugar.

Those fiber-y foods slow digestion, which means the sugar from your meal isn't hastily thrown into your bloodstream. Instead, the fiber helps everything break down more slowly, and there's more time for the sugar to be properly absorbed.

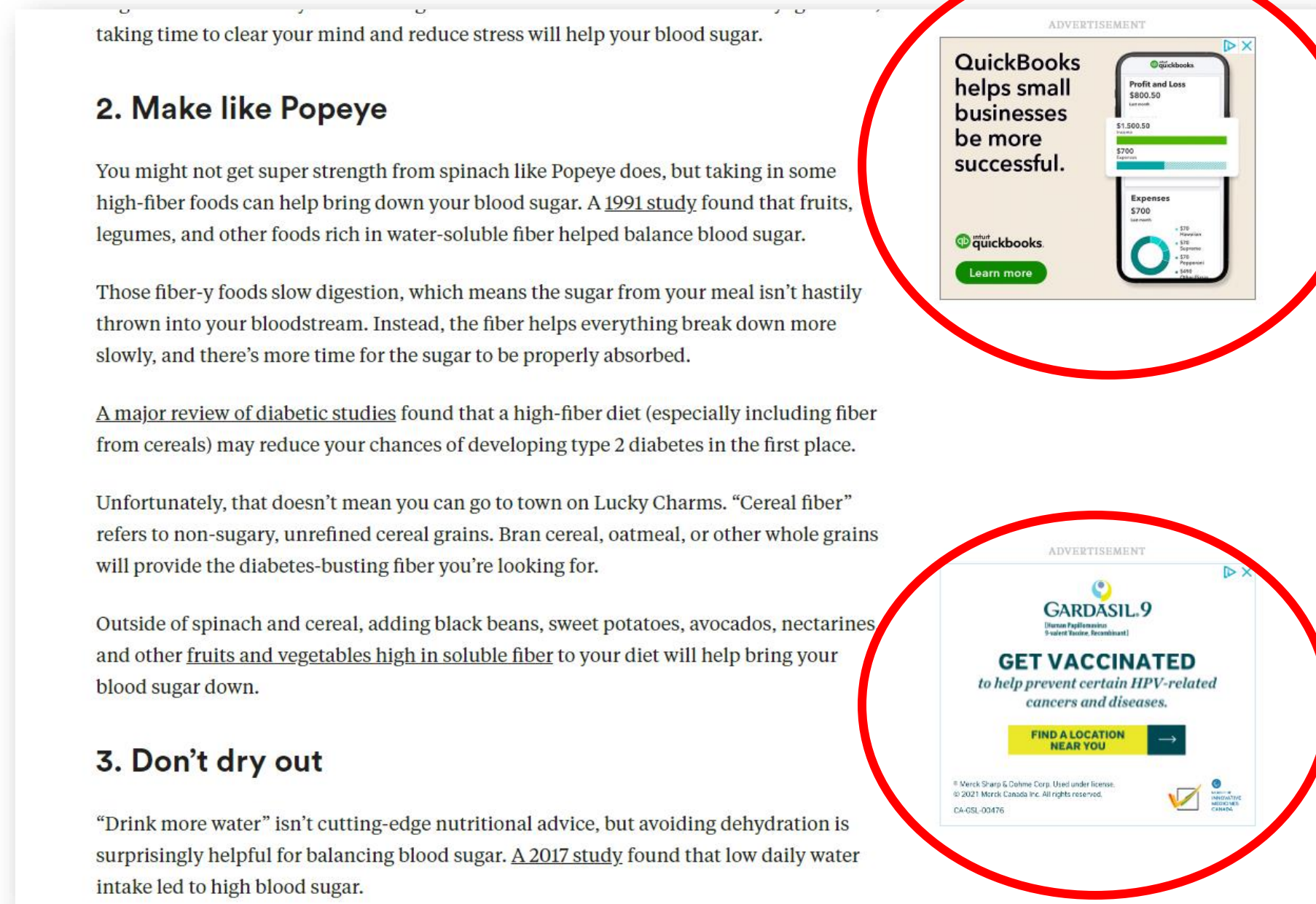
A [major review of diabetic studies](#) found that a high-fiber diet (especially including fiber from cereals) may reduce your chances of developing type 2 diabetes in the first place.


Unfortunately, that doesn't mean you can go to town on Lucky Charms. "Cereal fiber" refers to non-sugary, unrefined cereal grains. Bran cereal, oatmeal, or other whole grains will provide the diabetes-busting fiber you're looking for.

Outside of spinach and cereal, adding black beans, sweet potatoes, avocados, nectarines and other [fruits and vegetables high in soluble fiber](#) to your diet will help bring your blood sugar down.

3. Don't dry out

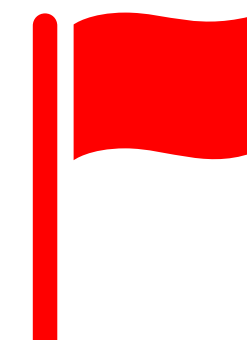
"Drink more water" isn't cutting-edge nutritional advice, but avoiding dehydration is surprisingly helpful for balancing blood sugar. A [2017 study](#) found that low daily water intake led to high blood sugar.



 .com

 There are multiple ads

 No date



This website is sharing more reliable online health information.

https://www.cdc.gov/diabetes/managing/manage-blood-sugar.html

The screenshot shows the CDC website page for 'Manage Blood Sugar'. The page includes a navigation menu on the left with categories like 'Diabetes Home', 'Diabetes Basics', 'Prevent Type 2', 'Living With Diabetes', 'Education and Support', 'Eat Well', 'Healthy Weight', 'Get Active!', 'Manage Blood Sugar', and 'Monitoring Your Blood Sugar'. The main content area features the title 'Manage Blood Sugar' with a sub-link for 'Español (Spanish)'. Below the title is a paragraph explaining the importance of keeping blood sugar levels in target range. A section titled 'How can I check my blood sugar?' provides information on using a blood sugar meter or a continuous glucose monitor (CGM). An image shows a doctor and a patient looking at a tablet. A text box below the image states: 'Your blood sugar target is the range you try to reach as much as possible. Read about [Monitoring Your Blood Sugar](#) and [All About Your A1C](#).' At the bottom of the page, the text 'Page last reviewed: April 28, 2021' is circled in green. The content source is listed as 'Centers for Disease Control and Prevention'.

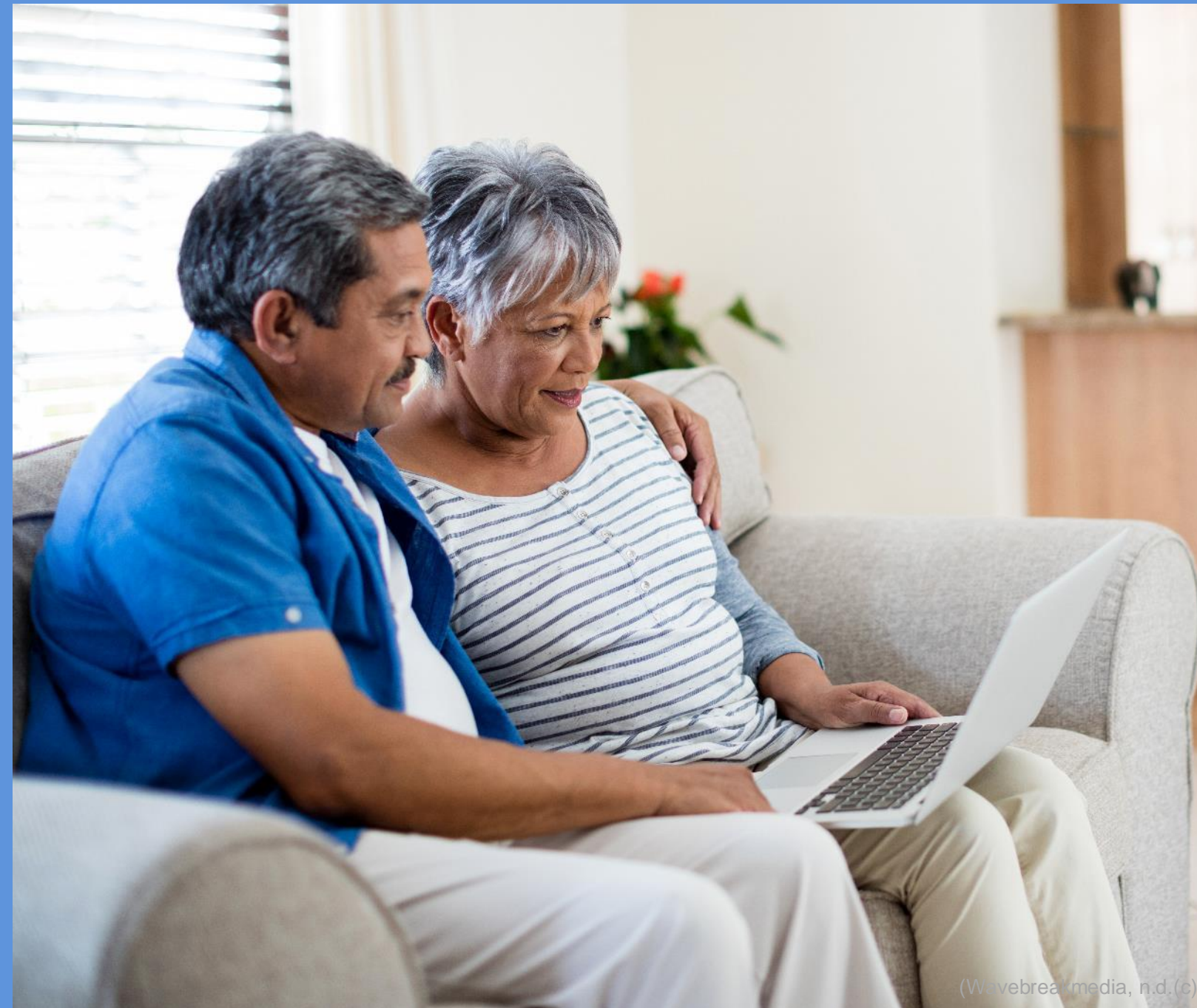
 .gov

 No ads

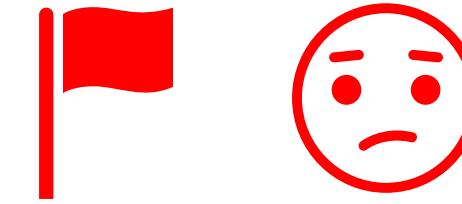
 Date



Summary



Review: More Reliable and Less Reliable Online Healthcare Information



More Reliable Information:

- Tries to educate and share accurate information.
- Is from experts, and is checked by other experts.
- Is current and up to date.
- Possible website endings: **website.gov**, **website.org**, **website.edu**



Less Reliable Information:

- Tries to get money or sell products.
- Is not from experts, and is not checked by other experts.
- Is not up to date and may have incorrect information.
- Possible website ending: **website.com**



Image Credits

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Note: screen captures were provided by iCON on slides 3, 8, 14, 16-29, 36-39, 41-45, 47-49.

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