

SUMMERVILLE

Family Health Team

Beyond the Hype:

Making Informed Choices About Supplements

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How Common Is Supplement Use in Older Adults?

- Nearly 8 out of 10 adults aged 65 and older now use at least one supplement
- About 3 in 10 older adults take 4 or more supplements at the same time
- Canadians spend approx \$10 billion every year on supplements and natural health products



Why Are We Turning To Supplements?

- Compensating for nutrient gaps
- Supporting bone and heart health
- Enhancing memory, energy, and sleep
- Boosting immune health
- Heard it from friends, family, or social media
- And more!





"PAUSE" Before Purchasing



- P**urpose..... Why am I buying this product?
- A**ssess..... Does research show it actually works?
- U**nderstanding risks.. What are the potential side-effects?
- S**uitability..... Is it appropriate for me?
- E**valuate..... Balance the pros and cons.





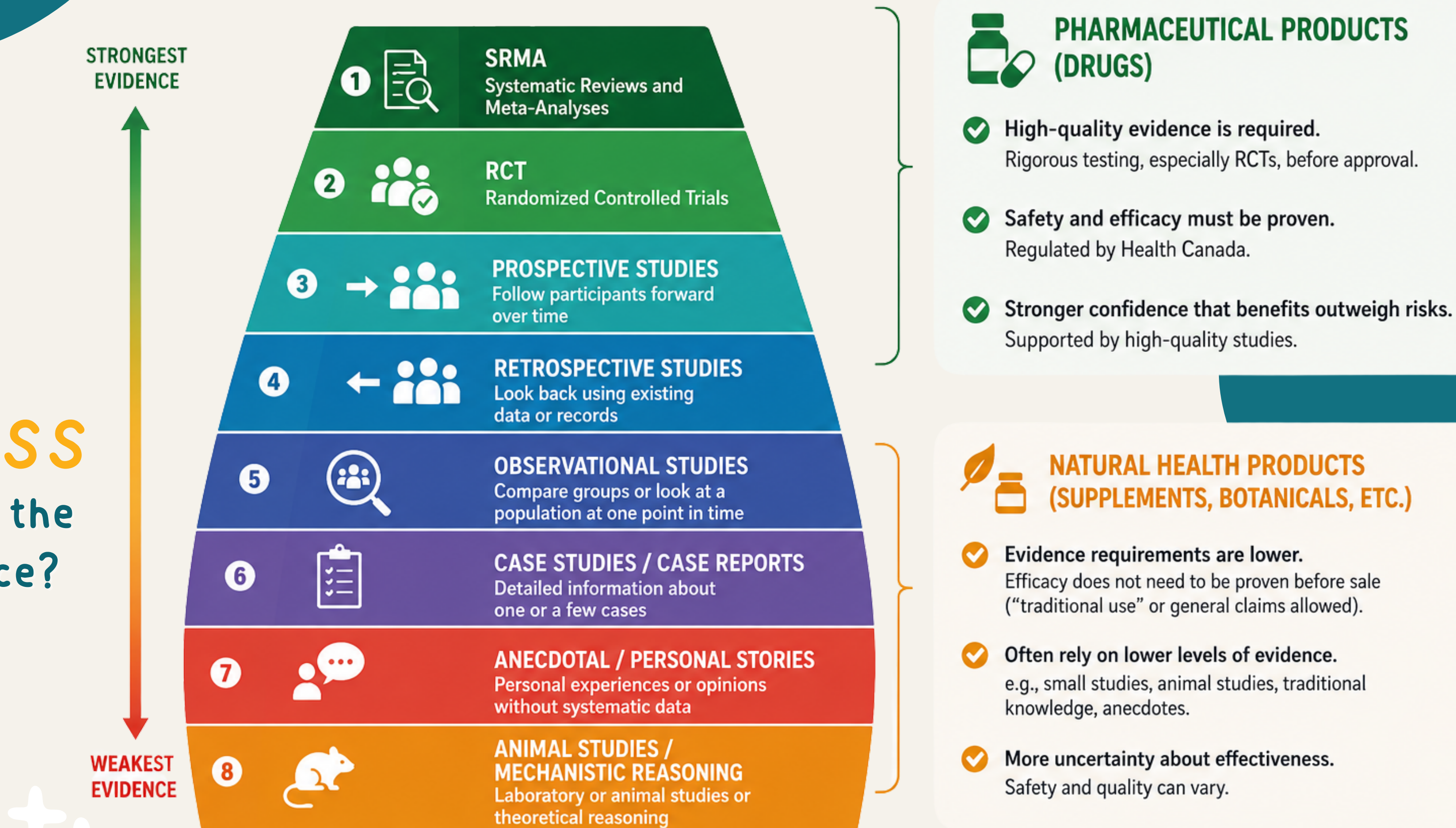
PURPOSE

What am I hoping
to get out of it?

- What are your goals by taking it?
 - What is meaningful for you?
 - Measurable outcomes
 - Reasonable timeframe for improvement
- Is there a deficiency I need to treat?
 - Improving energy
 - Enhancing sleep
 - Vitamins and minerals via bloodwork
- Can my issue be solved with changing my lifestyle?
 - Reducing stress
 - Increasing physical activity
 - Eating a more balanced diet
 - Increasing socialization

ASSESS

What is the evidence?



★ **Bottom line:** The higher the evidence on the pyramid, the more confident we can be that a product works as claimed and is safe.

UNDERSTANDING RISKS

Are they safe?

NATURAL $\neq$ RISK-FREE

- Quality, purity, and dose can vary between brands
 - Contamination
 - Mislabeling
- Health Canada does not approve all supplements before they are sold
 - Look for a NPN (natural product number) which indicates product has been authorized for sale by Health Canada
- More is not always better
- Unproven supplements are not replacements for evidence-based treatments

The background features a stylized illustration of a hand with two band-aids on the fingers. Scattered around the hand are various pills and capsules in different colors (orange, teal, grey, brown). A large, white, cloud-like shape with a teal outline is positioned on the right side of the image. The text is arranged as follows: a main title in orange, a subtitle in teal, and a list of concerns in black, all contained within or near the cloud shape.

UNDERSTANDING RISKS

Are they safe?

Common safety concerns:

- gastrointestinal side-effects
- drug interactions – risk increases with more medications and supplements you take
- increased risk of bleeding
- low blood sugar and blood pressure
- increased risk of liver injury



SUITABILITY

... given my medical
conditions and
medications



- 
- The same supplement can have different effects and risks on different people
 - Consider your own personal medical history, including:
 - Liver and kidney function
 - Medical conditions (ie: diabetes, bleeding disorder, heart disease)
 - Prescription and other non-prescription medications you are taking
 - Frailty
 - Other substance use (ie: cannabis, alcohol, tobacco)
- 



EVALUATE

Balancing the pros and cons

Is the potential benefit worth the risk?

PROS

- How likely is it to help?
- How meaningful would the benefit be?

CONS

- Side-effects
- Drug interactions
- Cost (and opportunity cost)

A product with modest potential benefit and minimal risk may be reasonable to try.
A product with uncertain benefit and meaningful risk deserves much more caution.

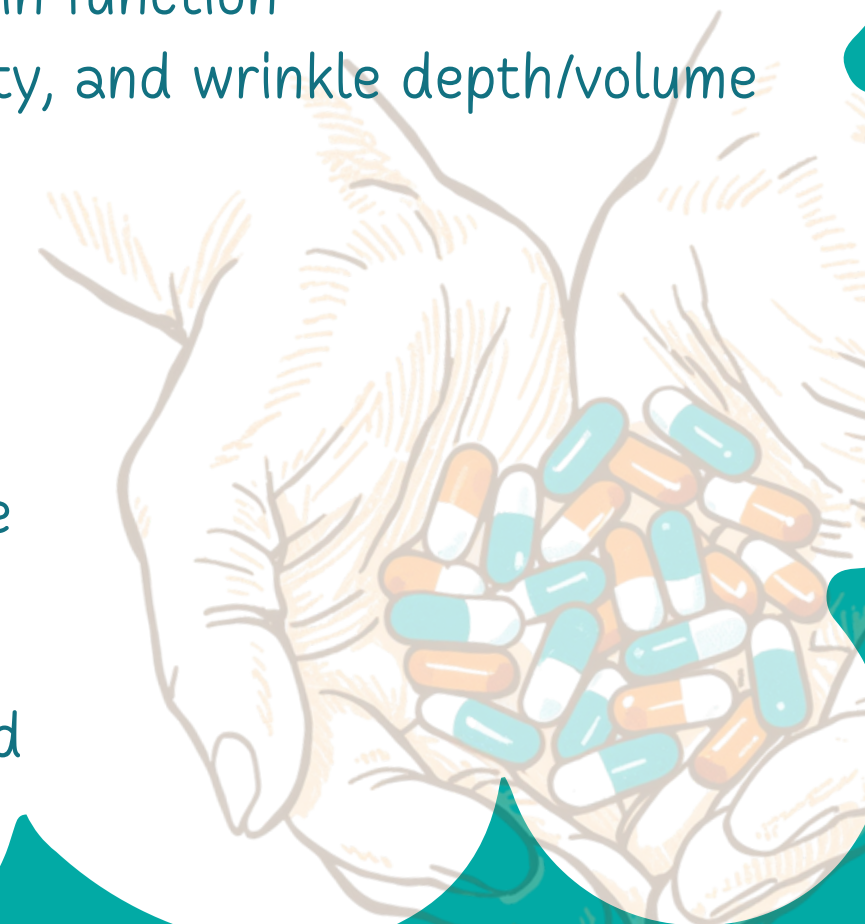


Now Lets Put This
Into Practice...

Collagen +



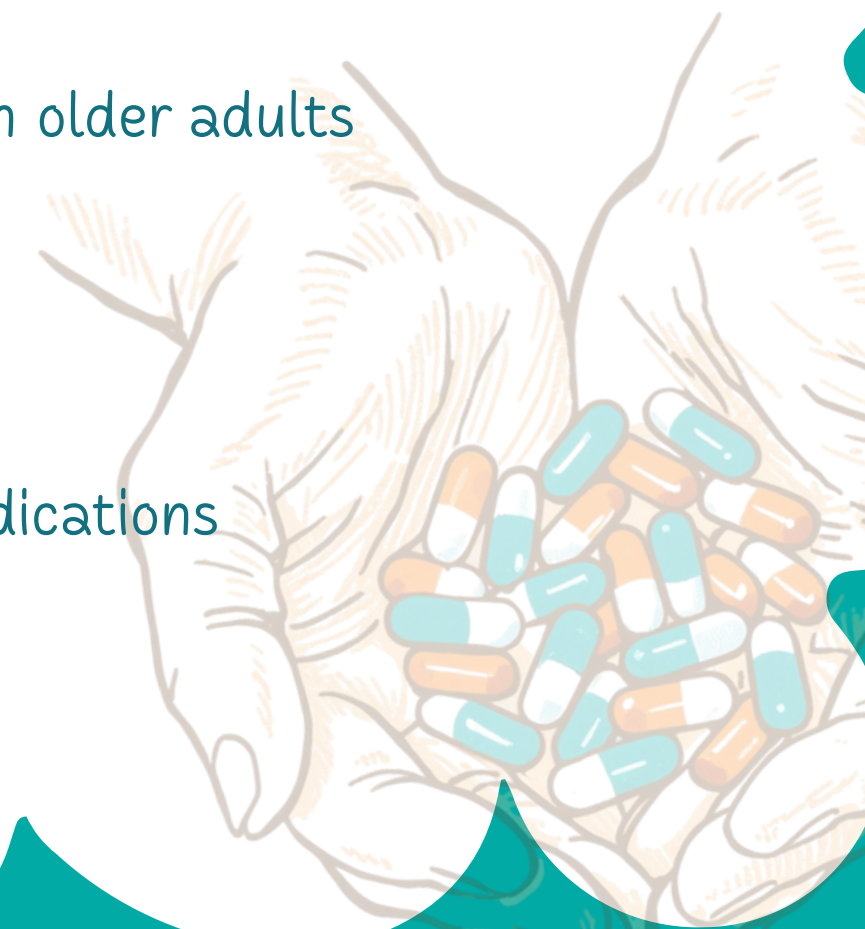
- P** common claims include anti-aging (reducing wrinkles, healthier nails and hair), joint pain and osteoarthritis
- A** **osteoarthritis:** SRMA, small-to-moderate reductions in pain and improvement in function
skin: SRMA (but most trials had high risk of bias), improved hydration, elasticity, and wrinkle depth/volume
- U** generally well tolerated
- S** fish/shellfish allergy, religious/dietary restrictions, pre-existing kidney disease
- E** costs between \$25-90 per month depending on formulation, source, and brand



Magnesium



- P** common claims include reduction in stress/anxiety, improvement in sleep, muscle cramps
- A**
 - migraine:** SRMA, reduces frequency and intensity of migraine attacks
 - sleep:** observational studies, better sleep quality and longer sleep duration
 - muscle cramps:** SRMA, unlikely to provide meaningful benefit for leg cramps in older adults
- U** generally safe but may cause diarrhea and too high blood magnesium
- S** history of kidney disease, IBS-D, taking certain antibiotics, or osteoporosis medications
- E** costs between \$10-20 per month



References:

<https://pubmed.ncbi.nlm.nih.gov/30684032/>

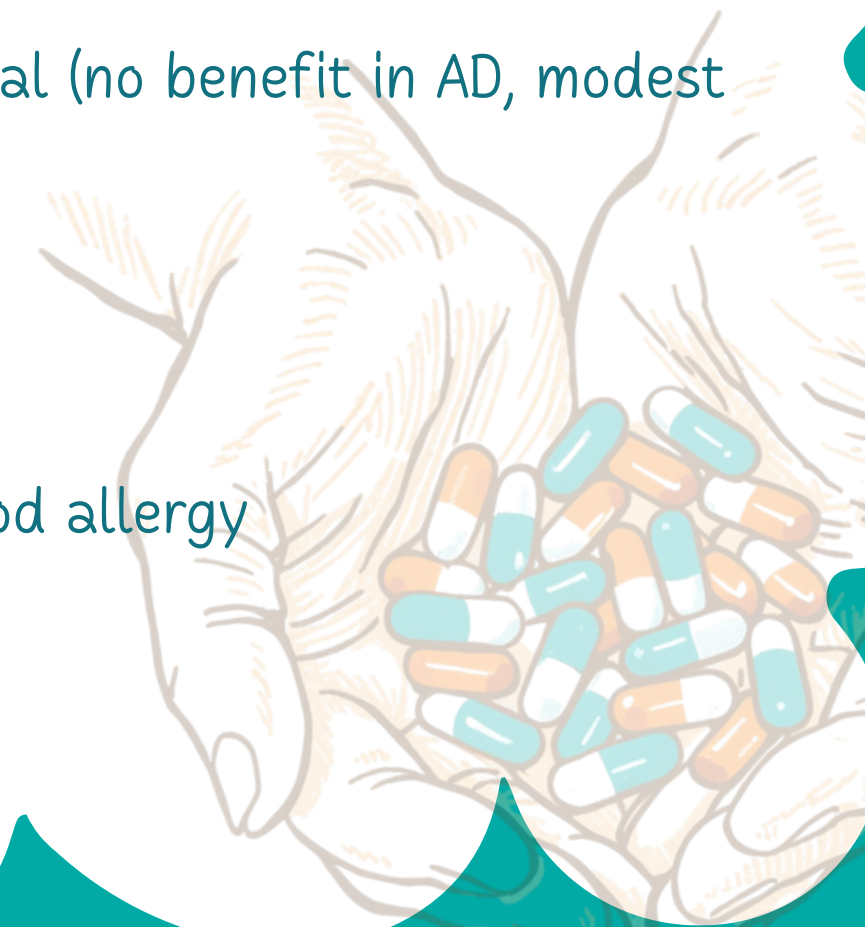
<https://pubmed.ncbi.nlm.nih.gov/34883514/>

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009402.pub3/full>

Omegas and Fish Oils



- P** common claims include heart, brain, and joint health, anti-inflammatory, cholesterol-lowering
- A** **triglyceride-lowering:** SRMA, lowers triglycerides by roughly 15-30%
heart: RCTs, benefits not consistently proven at supplement-range doses
brain: prospective studies are generally favourable; RCTs are generally neutral (no benefit in AD, modest benefit in MCI)
- U** generally safe but may cause diarrhea and altered taste
- S** history of heart arrhythmia, taking blood thinners, vegetarians/vegans, seafood allergy
- E** costs between \$20-30 per month



References:

<https://www.canada.ca/en/health-canada/services/food-nutrition/food-labelling/health-claims/assessments/summary-assessment-health-claim-about-ecosapentaenoic-acid-docosahexaenoic-acid-triglyceride-lowering.html>
<https://jamanetwork.com/journals/jama/fullarticle/2773120>

Ashwagandha



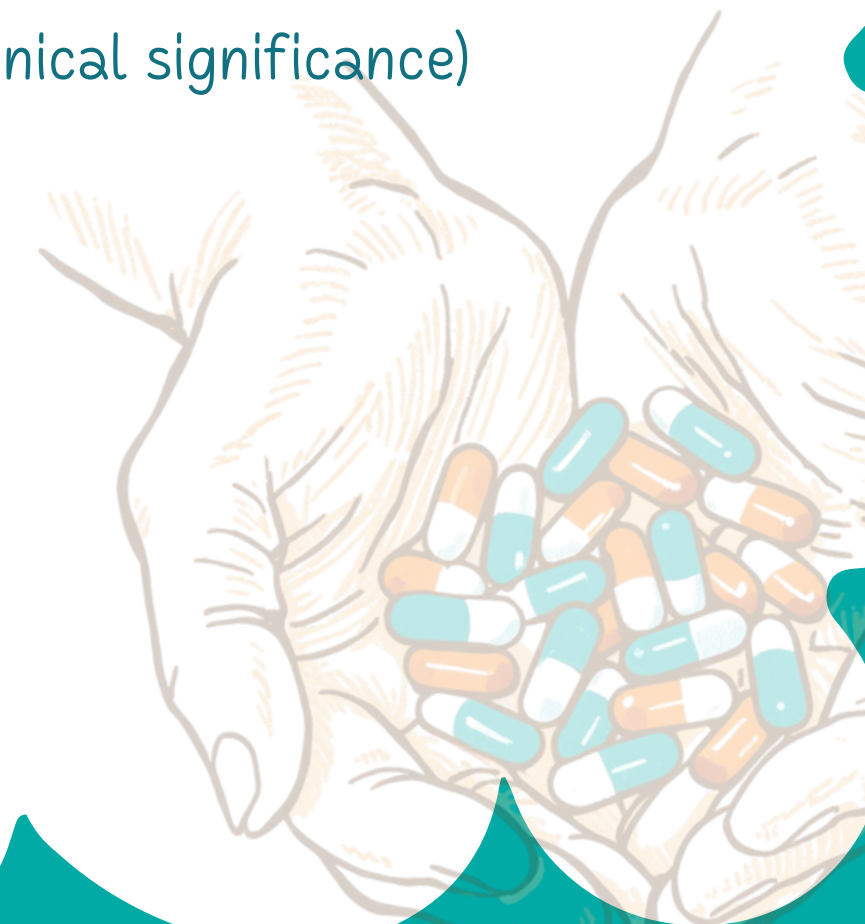
- P** common claims include reduction in stress, anxiety, and improved sleep
- A** **stress and anxiety:** SRMA, significant reductions in anxiety and stress at 300–600 mg/day
sleep: RCTs, at 600 mg/day or higher; evidence weaker than for stress
- U** short-term use generally well tolerated
evidence of liver damage are emerging, typically after 3 weeks to 10 months of use
- S** history of liver disease, alcohol use, taking medications that affect the liver
- E** costs between \$20–30 per month



Turmeric and Curcumin



- P** common claims include arthritis, anti-inflammatory
- A** **osteoarthritis:** SRMA, improved knee OA pain and function
anti-inflammatory: SRMA, showed reduction in inflammatory biomarkers (? clinical significance)
- U** generally safe but may cause diarrhea, nausea, bloating, gas
evidence of liver damage are emerging, typically after 1-4 months of use
- S** history of liver disease, taking blood thinners
- E** costs between \$15-20 per month



Peptides*



- P** common claims include faster recovery from injury, muscle growth, fat loss, and anti-aging
- A** mostly animal studies; a few human studies but they were small and uncontrolled the claimed benefits potentially a placebo effect, amplified by popularity on social media
- U** Many unauthorized for claimed uses, unregulated sources with uncertain purity and dose Potential for contamination or mislabelling, Short-term and long-term safety unknown
- S** Without good safety data, it's difficult to know who can use these products safely Injection adds additional risks, Particular caution with underlying medical conditions or medication
- E** Uncertain benefit + uncertain safety + potentially high cost costs between \$100-400+ per month depending on formulation



*non-prescription/unapproved peptides, marketed for wellness and anti-aging



Where to Find Reliable Information

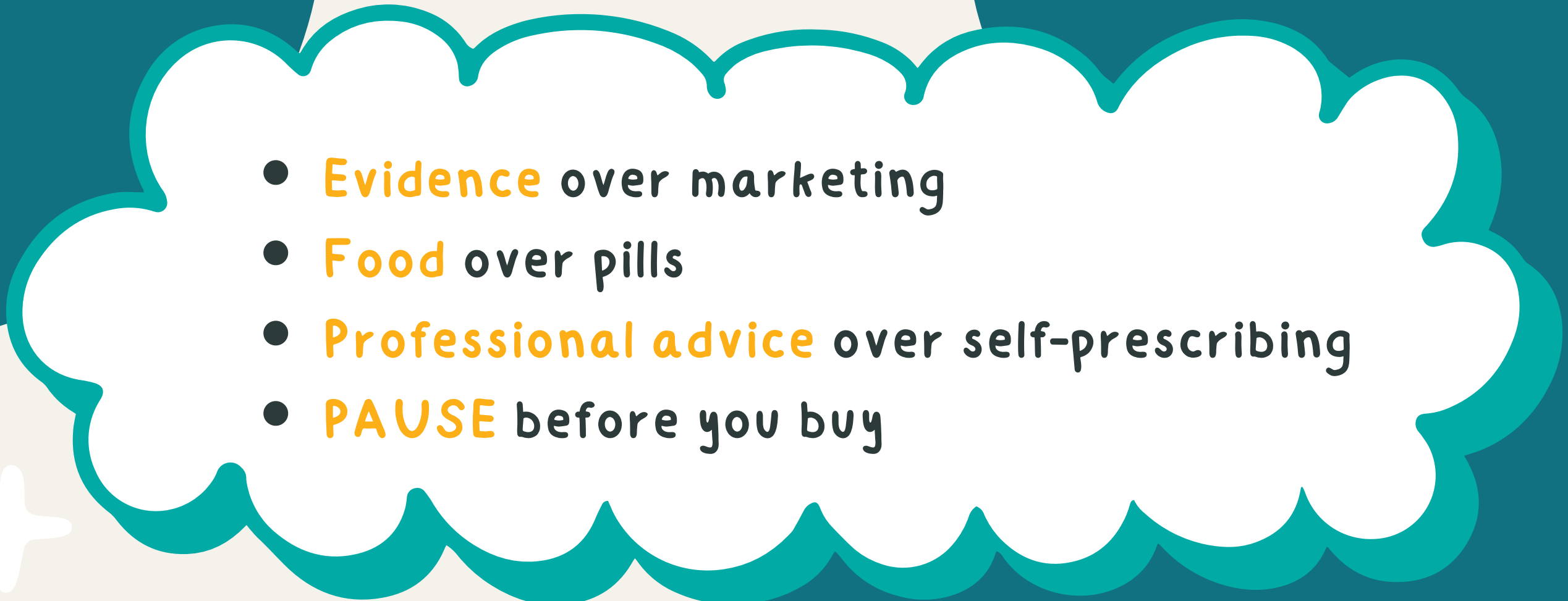


LIKELY RELIABLE:

- Healthcare professionals
- .edu websites
- .gov websites
- Health Canada

CAUTION:

- websites with purchase options
 - social media and “health gurus”
 - AI tools
- 



To summarize...

- **Evidence** over marketing
- **Food** over pills
- **Professional advice** over self-prescribing
- **PAUSE** before you buy

