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and Industry Transparency Center*

WholeFoods MAGAZINE
Informing and Educating the Natural Products Industry

INDUSTRY
TRANSPARENCY CENTER



ALKEMIST LABS

Marketing Quality: Our Last Legal Value Proposition

Elan Sudberg, CEO & Co-Founder, Alkemist Labs



You may know me from some of these things:

- Crushing the adulterated Hoodia market with my mom's light microscope.
- Fighting for fit-for-purpose testing before "lab in a box" became mandated by failing attorney generals.
- Launching and chairing the first Cannabis Committee. Sorry?
- Igniting the conversation on transparency so quality can actually be marketed. Its one of our last value propositions.
- Launching and chairing the first Psychedelic Plant and Fungi Committee.
- And most recently connecting key members of HHS with our industry trade associations, so we stay relevant in the larger MAHA conversation.



Sidney Sudberg

Founder & CSO

Alkemist Labs





ALKEMIST LABS



APPLE



GOOGLE



AMAZON



HARLEY



DISNEY



MATTEL



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...
It's
Story
Time!!!

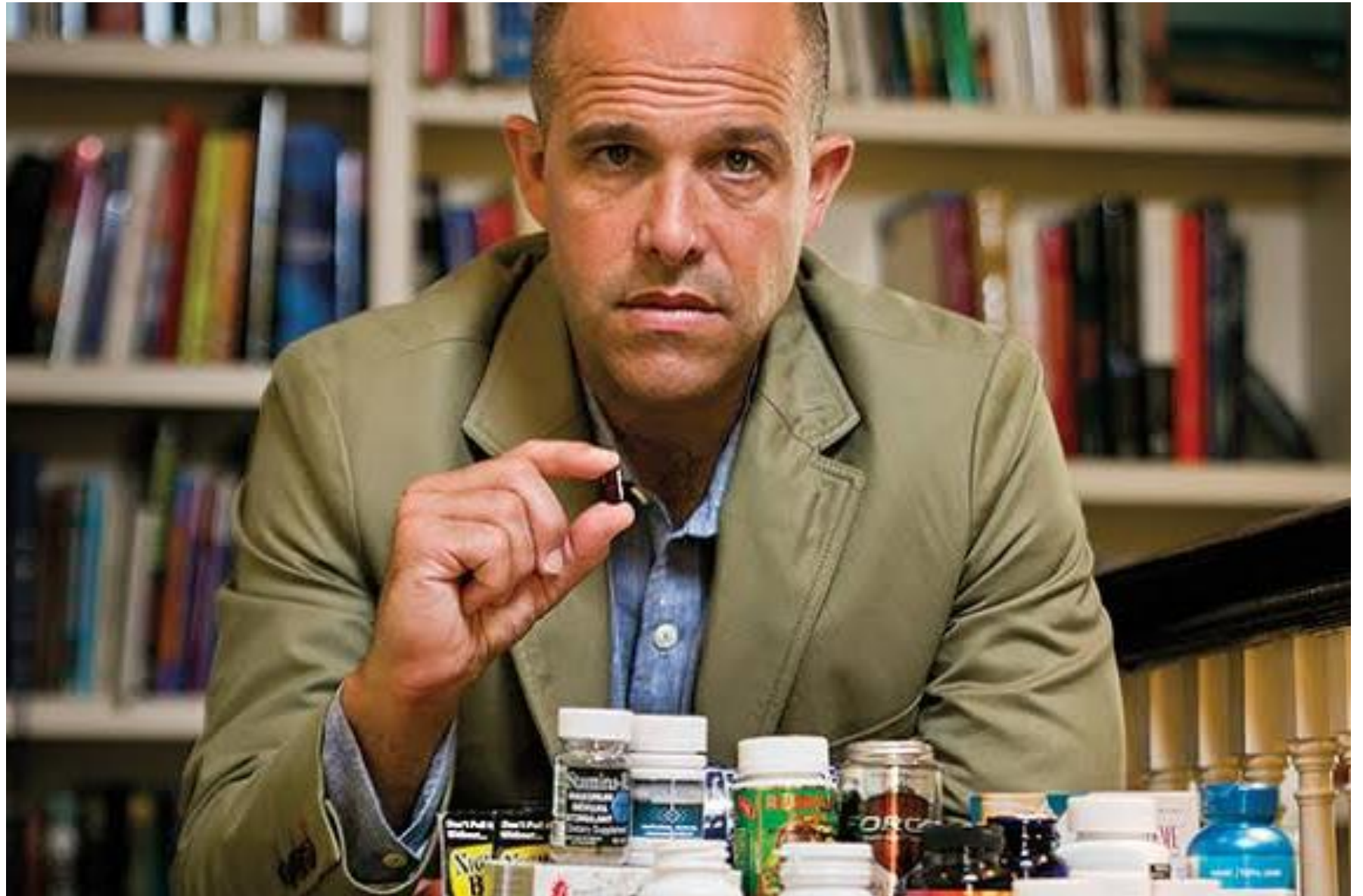




#BMMFM

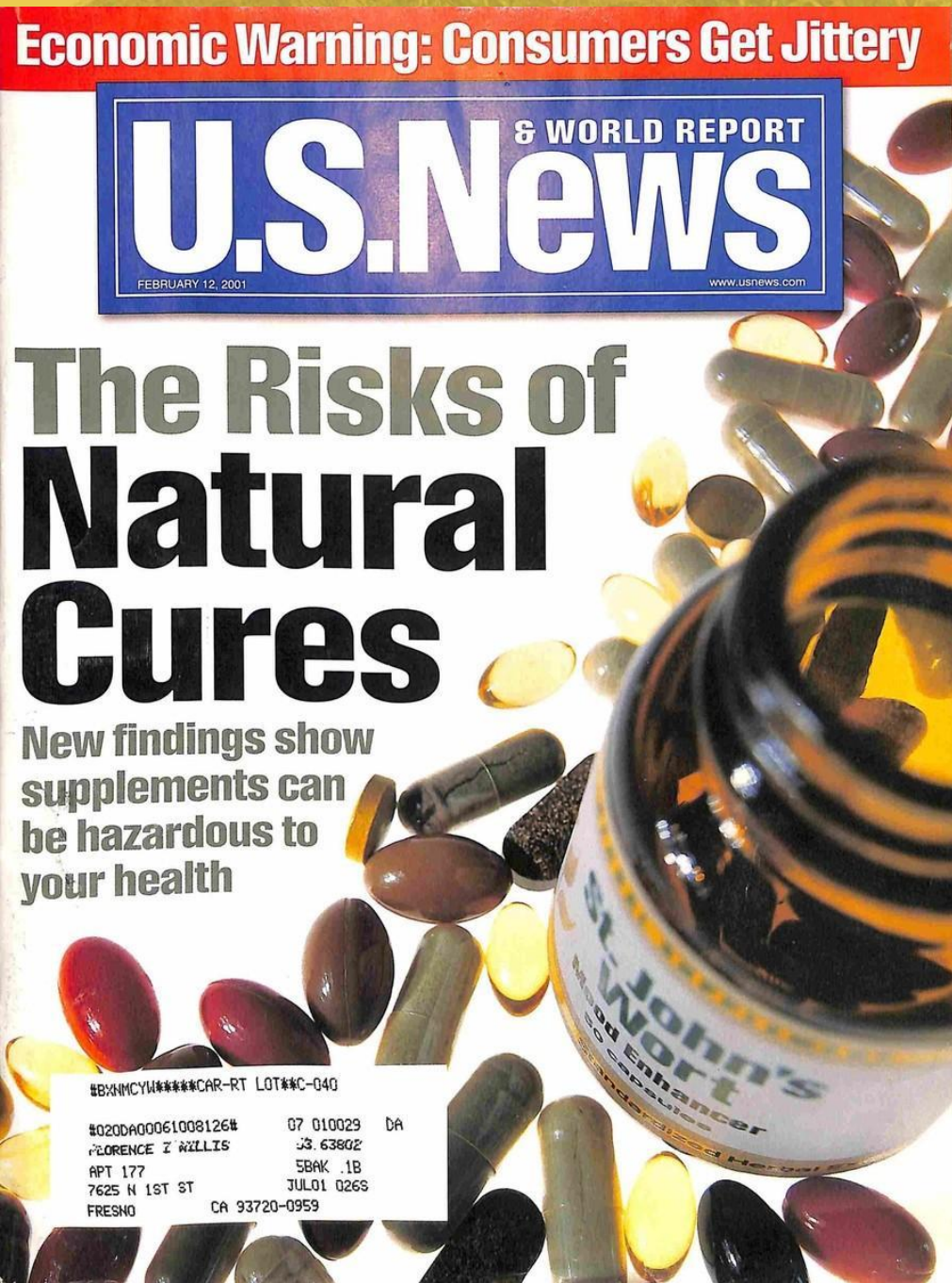
This is the story
mainstream
media keeps
telling about
us.

#BMMFOI





We are at war with a false narrative.
Unregulated. Untested. Unsafe. All false—or
mostly false.



BRAIN HEALTH

Don't buy into brain health supplements

Forget about those over-the-counter products that promise better memory.

February 20, 2026

By **Maureen Salamon**, Executive Editor, *Harvard Women's Health Watch*

Reviewed by **Pieter Cohen, MD**, Contributor



#BMMFOI

Children and adults are gobbling supplements. Do you know the risks?

Among some population groups, it's not unusual to down four or more vitamins or supplements every day, new research shows



By [Anahad O'Connor](#)

May 1, 2024 at 7:00 a.m. EDT



Prev
Improv
Rated #
Recom

Prevagen
Health
Better

Prevagen Imp

SCIENCE & MEDICINE

Why you should think twice before taking a daily multivitamin to ward off death



After analyzing health and nutrition data from nearly 400,000 Americans, researchers found that people who took multivitamin supplements had a small but significantly greater risk of premature death than people who did not take them. (Mark Lennihan / Associated Press)

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20-year-old who almost killed Trump was a bright student, had a job and belonged to a gun club

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#BMMFOI

All Those Pills and Powders May Be Unnecessary

Dietitians recommend the foods that supply the same, or better, health benefits.

By ALICE CALLAHAN

Marilyn Oppizzo, a dietitian and researcher at Stanford, said she was occasionally shocked by the number of supplements her clients take. A "stack" in the morning and another at night, she said — sometimes 20 types or more.

In a 2024 survey of more than 3,000 U.S. adults, more than half of the respondents reported using supplements regularly. Dr. Oppizzo said many of her clients started taking them after being influenced by podcast hosts or social media.

There can be good reasons to use supplements, Dr. Oppizzo said — if you have a nutrient deficiency, for example, or are pregnant.

But many of the supplements people take are unnecessary, she added, and can even be risky. Supplements can contain contaminants or excessive levels of nutrients, or interact with certain over-the-counter or prescription medications, said Dr. JoAnn Manson, a professor of medicine at Harvard Medical School.

It's usually safer and healthier to get important nutrients from your diet, Dr. Manson said. And in many cases, you're probably already doing so without trying.

Here are 10 of the most popular dietary supplements that people in the United States take, and what to eat instead to get the same benefits.

MULTIVITAMINS Many people take multivitamins as a "backstop" just in case they don't get enough vitamins and minerals from their diet, said Wesley McWhorter, a dietitian in Houston.

And while it's true that some people may benefit from taking multivitamins — including older adults, those on restrictive diets and those who have trouble absorbing nutrients (like those with celiac disease or Crohn's disease) — most people can get all of the nutrients they need by following a balanced diet, Dr. Manson said.

This includes eating plenty of fruits and vegetables, legumes, nuts and seeds, whole grains, dairy products and healthy sources of protein, she said.

The more colorful the fruits and vegetables you eat, the wider the range of nutrients you'll get, said Ethan Balk, a clinical associate professor of nutrition at New York University.

MAGNESIUM Magnesium supplements have been touted for insomnia, migraine headaches, depression, constipation and more.

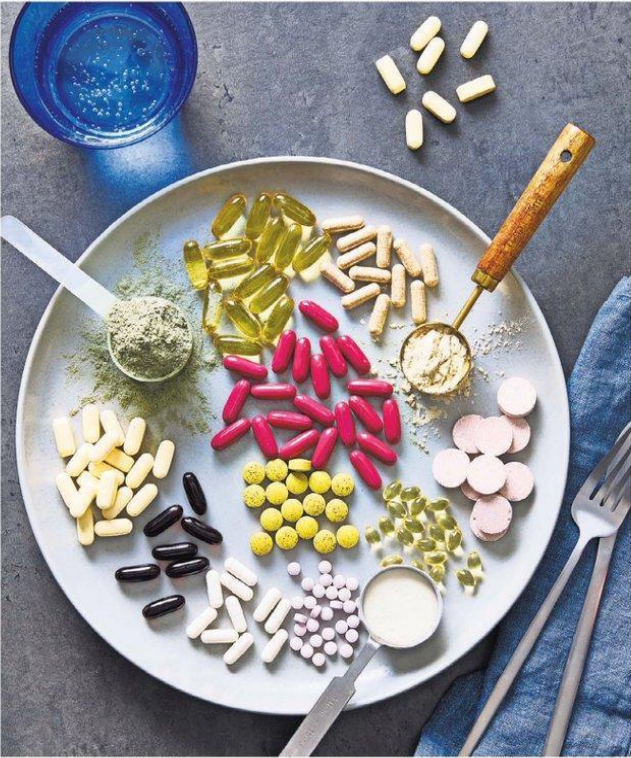
There is some, albeit limited, evidence to back up some of these claims, experts say. But it's worth seeing if you can get the same benefits from eating magnesium-rich foods first, said Abbe Bader, a dietitian at Massachusetts General Hospital.

About half of adults in the United States don't consume the recommended 310 to 420 milligrams of magnesium per day.

Try adding an ounce of pumpkin seeds (156 milligrams) or an ounce of almonds (77 milligrams) to yogurt or oatmeal. Or incorporate a half-cup of cooked spinach (98 milligrams), black beans (90 milligrams) or quinoa (55 milligrams) into soups or stews.

PROBIOTICS AND PREBIOTICS Probiotic supplements contain certain strains of "good" bacteria that are supposed to support a healthy gut microbiome, and prebiotics are substances that feed those good microbes to help them grow.

We don't have good evidence that these



GRADUATE BACKGROUND FOR THE NEW YORK TIMES

supplements help most people, however, Dr. Oppizzo said. So unless your doctor recommends them, she advised skipping them.

To support a healthy microbiome (and get essential nutrients in the process), Dr. Oppizzo recommended eating fermented foods like kimchi, sauerkraut, yogurt, kefir and miso. To ensure your gut microbes are well fed, eat plenty of fiber from plant-based whole foods, Dr. McWhorter said.

FISH OIL Research suggests that people who regularly eat fish — which is rich in omega-3 fatty acids — have better heart health and lower rates of dementia and depression.

Large clinical trials have generally failed to find the same benefits of taking omega-3 (or fish oil) supplements, though one trial suggested a reduced risk of cardiovascular events for people who did not routinely eat much fish.

If you want to get more omega-3s from your diet, the best sources are fatty fish like salmon, herring, sardines, mackerel and trout, said Whitney Linsenmeyer, an assistant professor of nutrition and dietetics at Saint Louis University. Aim for two serv-

ings per week.

Flax seeds, chia seeds, walnuts, canola oil and soybean oil are also good sources, she said.

VITAMIN C Many people take vitamin C supplements to strengthen their immune systems or ward off viral infections. And while it's true that vitamin C plays important roles in the body, including promoting wound healing and protecting against cell damage, the research supporting the benefits of vitamin C supplements is limited.

Federal guidelines recommend at least 75 milligrams of vitamin C per day for most women and at least 90 milligrams per day for most men.

It's easy to get that much from your diet, Dr. Linsenmeyer said.

Just one orange, two kiwis, a cup of cooked broccoli or a half-cup of cooked red bell pepper supplies the daily amount.

COLLAGEN Collagen supplements claim to reduce wrinkles, minimize joint pain and strengthen hair and nails. But the evidence for such benefits is mixed and limited, said Emma Laing, director of dietetics at the

University of Georgia.

Instead, support the natural synthesis of collagen in your body by consuming enough protein, vitamin C, copper and zinc — which you can do by following a balanced diet, Dr. Laing said.

To protect the collagen you already have, she added, limit sun and alcohol exposure, avoid tobacco, stay hydrated and get regular exercise.

VITAMIN B12 If you have a vitamin B12 deficiency or are at risk of developing one, your doctor may suggest that you take a B12 supplement.

Those at risk include older adults, vegans and vegetarians, people with certain autoimmune conditions, and those who take some medications (like metformin or proton pump inhibitors), said Wren Cahoon, a dietitian at UHealth University of Colorado Hospital.

For most other adults, it's not hard to get the recommended 2.4 micrograms per day from your diet. Fish, red meat, poultry, eggs and dairy products are all good sources, Ms. Cahoon said. In fact, just one serving of salmon, tuna or beef can provide around the daily amount.

Many breakfast cereals and plant-based milks are also often fortified with vitamin B12.

PROTEIN POWDER Those trying to lose weight or gain muscle may think that protein powder is a must-have.

But unless you struggle to consume enough — which older adults or people recovering from hospitalization or surgery often do — most people who follow a balanced diet get enough protein, Dr. McWhorter said.

To ensure you hit your daily target, Dr. Linsenmeyer recommended including a protein-rich food at every meal, like Greek yogurt, eggs, legumes or a lean protein source like fish, chicken or turkey.

FIBER The majority of people in the United States don't get the recommended 21 to 38 grams of fiber per day. And fiber supplements — sold as pills, powders and gummies — are positioned to fill that gap.

Getting fiber from whole foods, like legumes, nuts, whole grains, fruits and vegetables, is preferable since they can provide not only fiber but also other healthful nutrients like vitamins, minerals, protein and healthy fats, Ms. Bader said.

If you can't get enough fiber from your diet alone, it's fine to take a supplement, said Dr. Kyle Staller, a gastroenterologist at Massachusetts General Hospital. He recommends psyllium fiber, a soluble fiber that forms a gel in water. Unlike some other fiber supplements, he said, it can improve common digestive issues like constipation, diarrhea and abdominal pain.

GREENS POWDER These supplements usually contain a long list of powdered fruits, vegetables, herbs and seeds, and many contain added vitamins, minerals, probiotics and prebiotics. They're advertised as a convenient way to make up for whatever might be missing in your diet, especially fruits and vegetables.

But Dr. Oppizzo said that greens powders were little more than "glorified multivitamins."

"They definitely don't replace the act of eating your actual vegetables," Dr. McWhorter said.

Greens powders can also be expensive, with some running around \$100 for a one-month supply. You're better off spending that money on fresh or frozen fruits and vegetables, Dr. Balk said.

"The real food is going to work just as great, if not better," he said.

SEP 10 BEST & WORST MULTIVITAMINS PAGE 21

HOT NEW SMART PHONES PAGE 24

LATEST 3D TVs PAGE 38

5 WAYS TO SLASH YOUR CELL PHONE BILL PAGE 13

SEPTEMBER 2010 | CONSUMERREPORTS.ORG

ConsumerReports

TOP COMPUTERS & PRINTERS Page 28

The 12 Most Dangerous Supplements

Which ones to avoid

Why they're on the market

PLUS What's worth trying instead

#BMMFOI

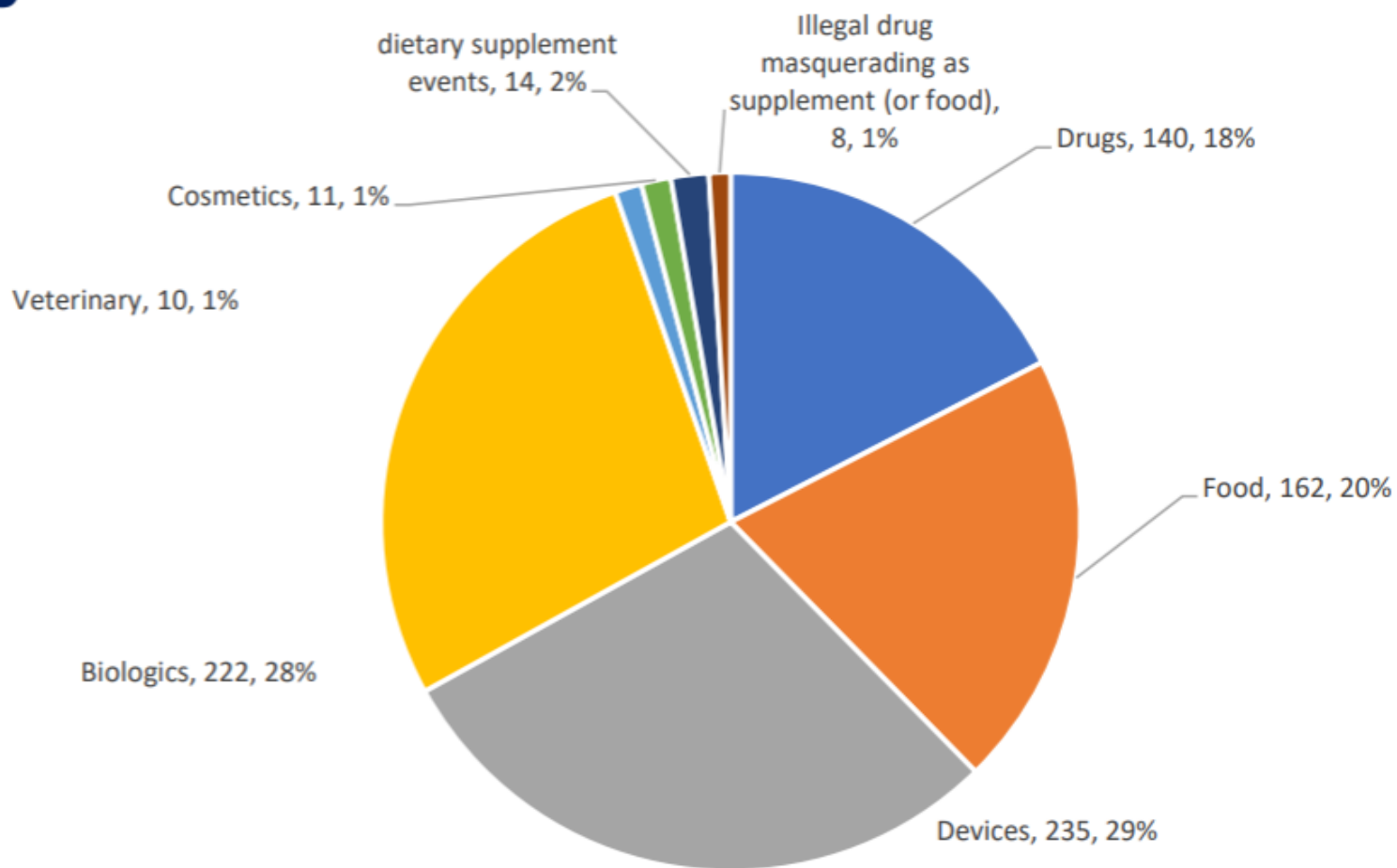
Recall events by product category

Most common product recall event types were for:

- Medical Devices (29%),
- Biologics (28%),
- Foods (20%), and
- Drugs (18%)

14 dietary supplement recall events accounted for 2% of calendar year 2019 recalls categorized by FDA from 1/1/2019 to 6/26/2019.

Recall events by category of products involved in recall event
(recalls conducted between 1/1/2019-6/26/2019)

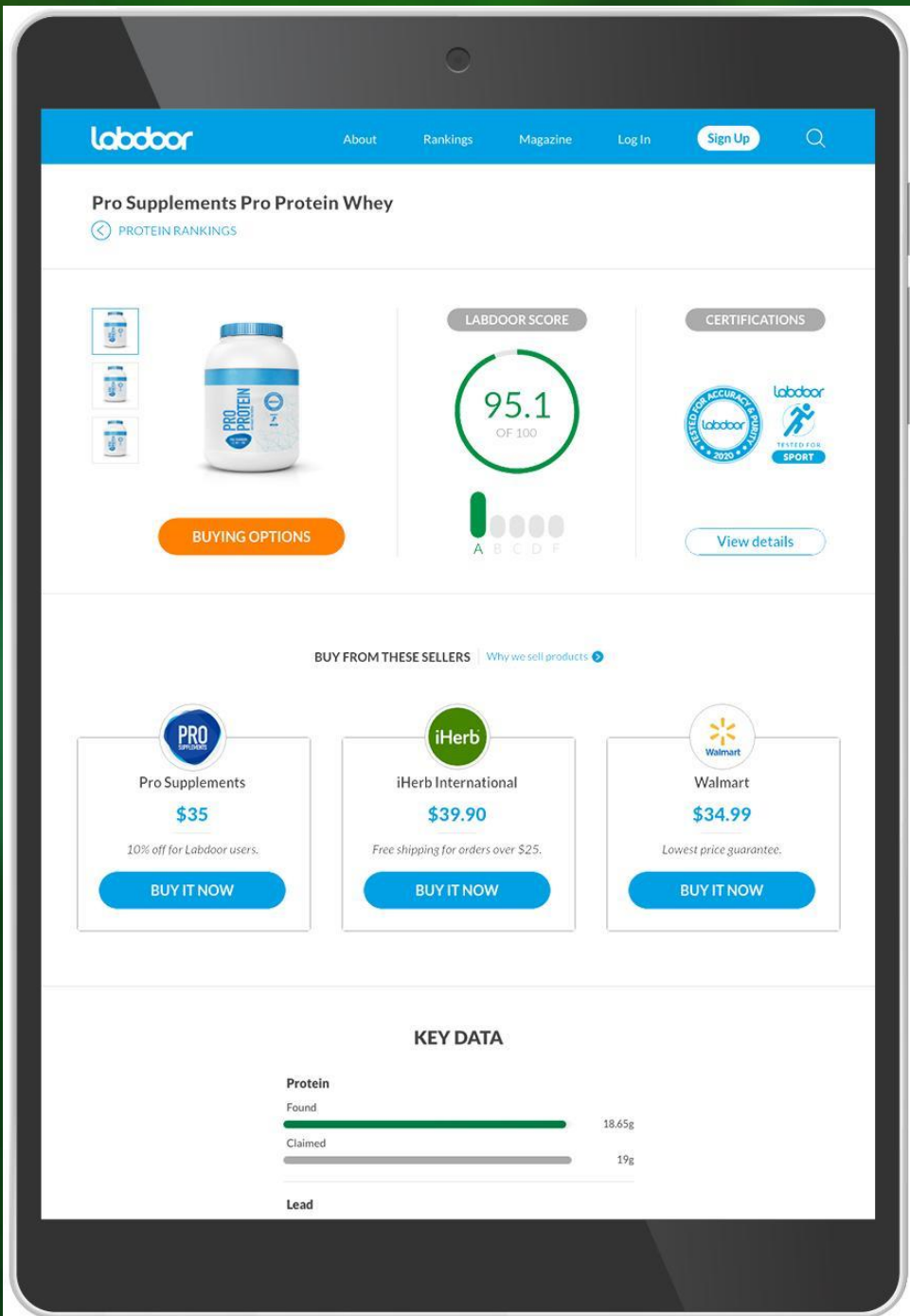


The background of the slide features a close-up of turmeric root and its bright orange powder. The root is on the left, and the powder is on the right, both set against a solid orange background.

Now, new stories are being
written about our
industry—
by our industry.

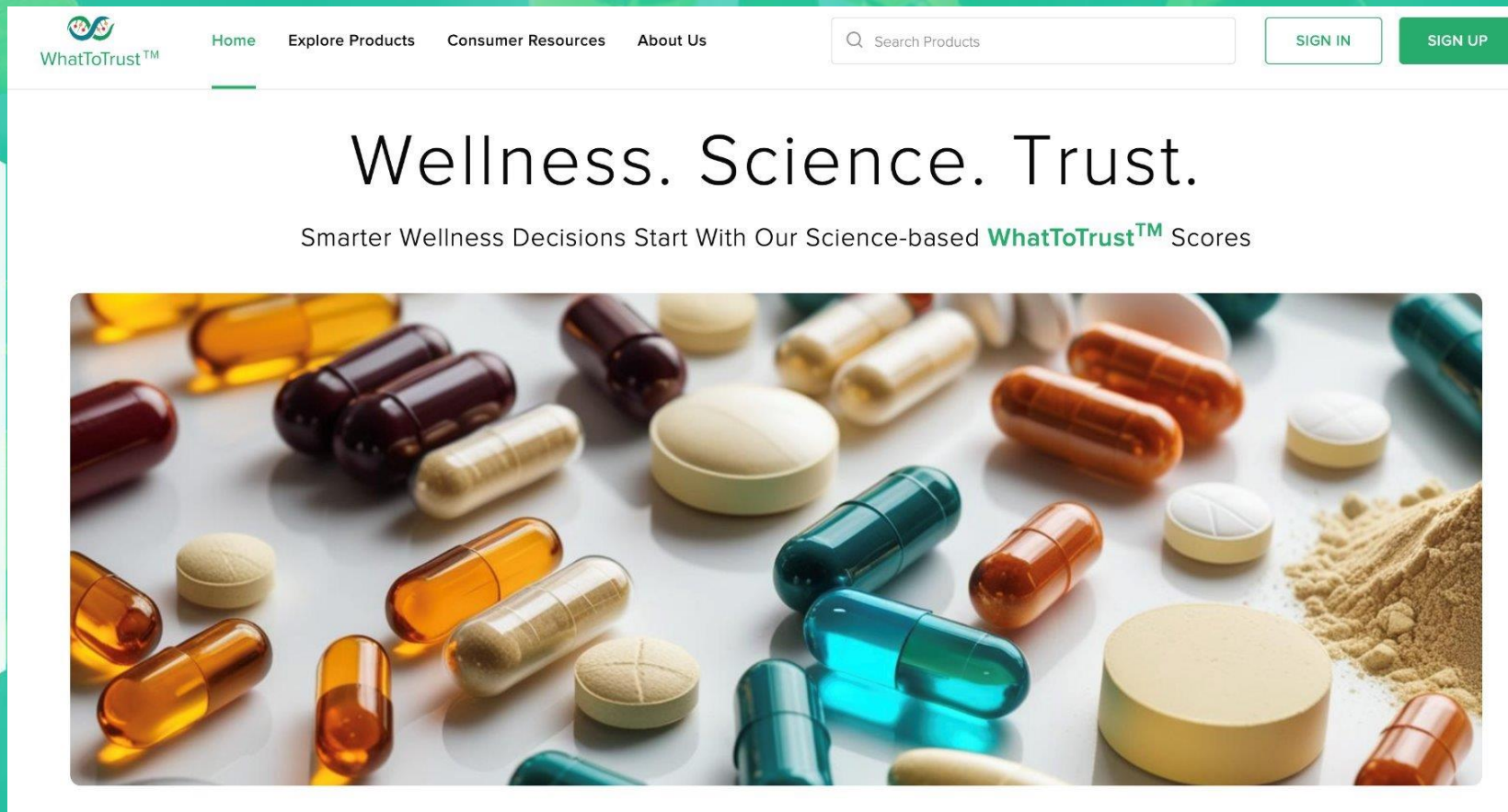
...

#BOIFOI



#BOIFOI
They're
writing
your story...

#BOIFOI
They're
writing
your story...



Scientific Testing and Methods Behind WhatToTrust™ Scores.



Ingredient and Product Pre-clinical Validation Testing

This type of testing evaluates the safety, efficacy, and biological effects of specific ingredients and multi-ingredient products, prior to clinical trials. It c...



CanTRUST by Canomiks® Ingredient and Product Pre-Clinical Testing

Using its proprietary genomics and bioinformatics methods, Canomiks validates the ingredient and product's safety and efficacy before proceeding to...



Ingredient and Product Clinical Trial/Testing

The ingredient or a multi-ingredient product is tested in humans to assess its effectiveness for the intended health benefits. Typically, a placebo is...



Ingredients vs. Product Testing



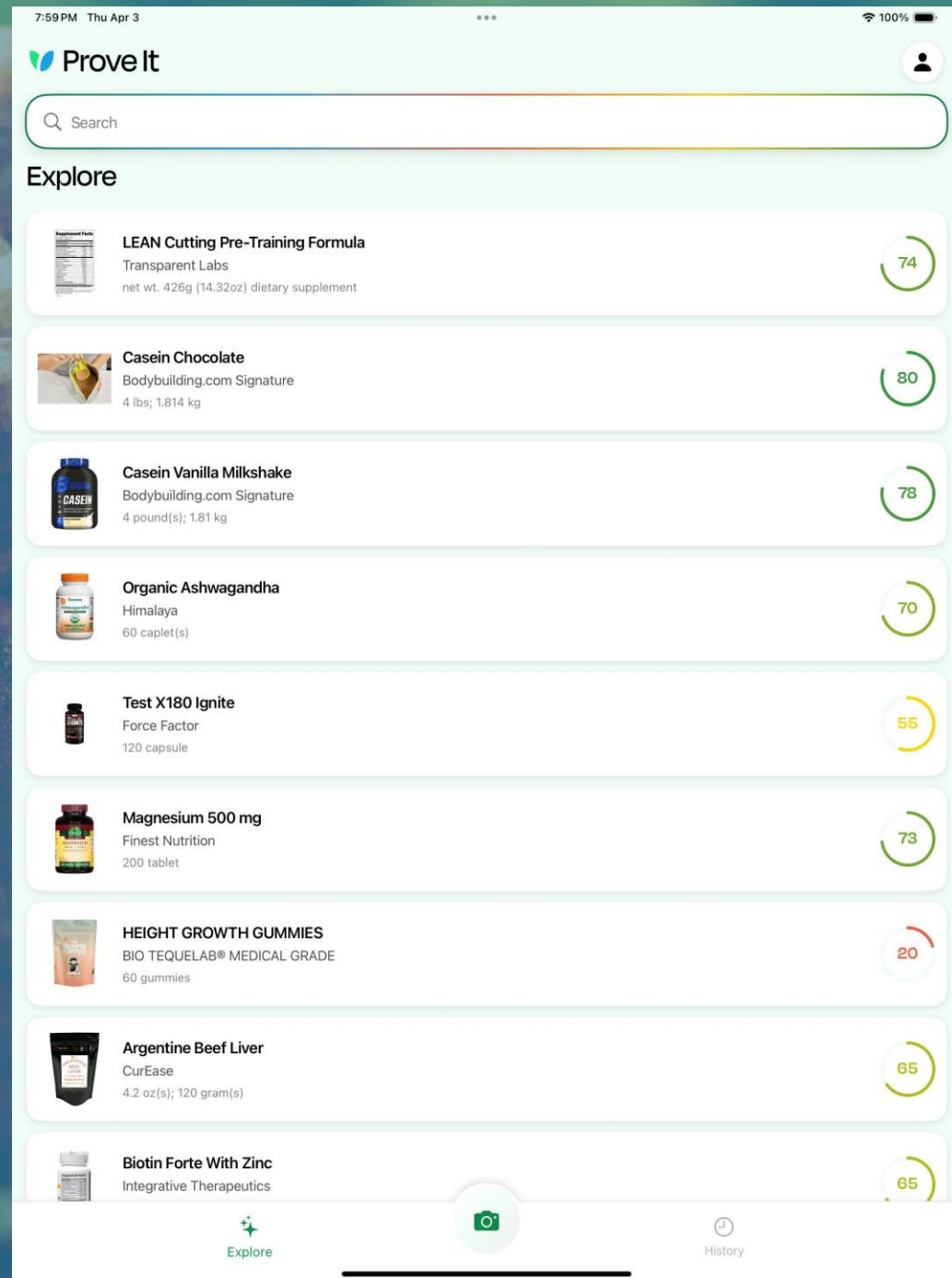
Ingredient Quality Batch-to-Batch Testing

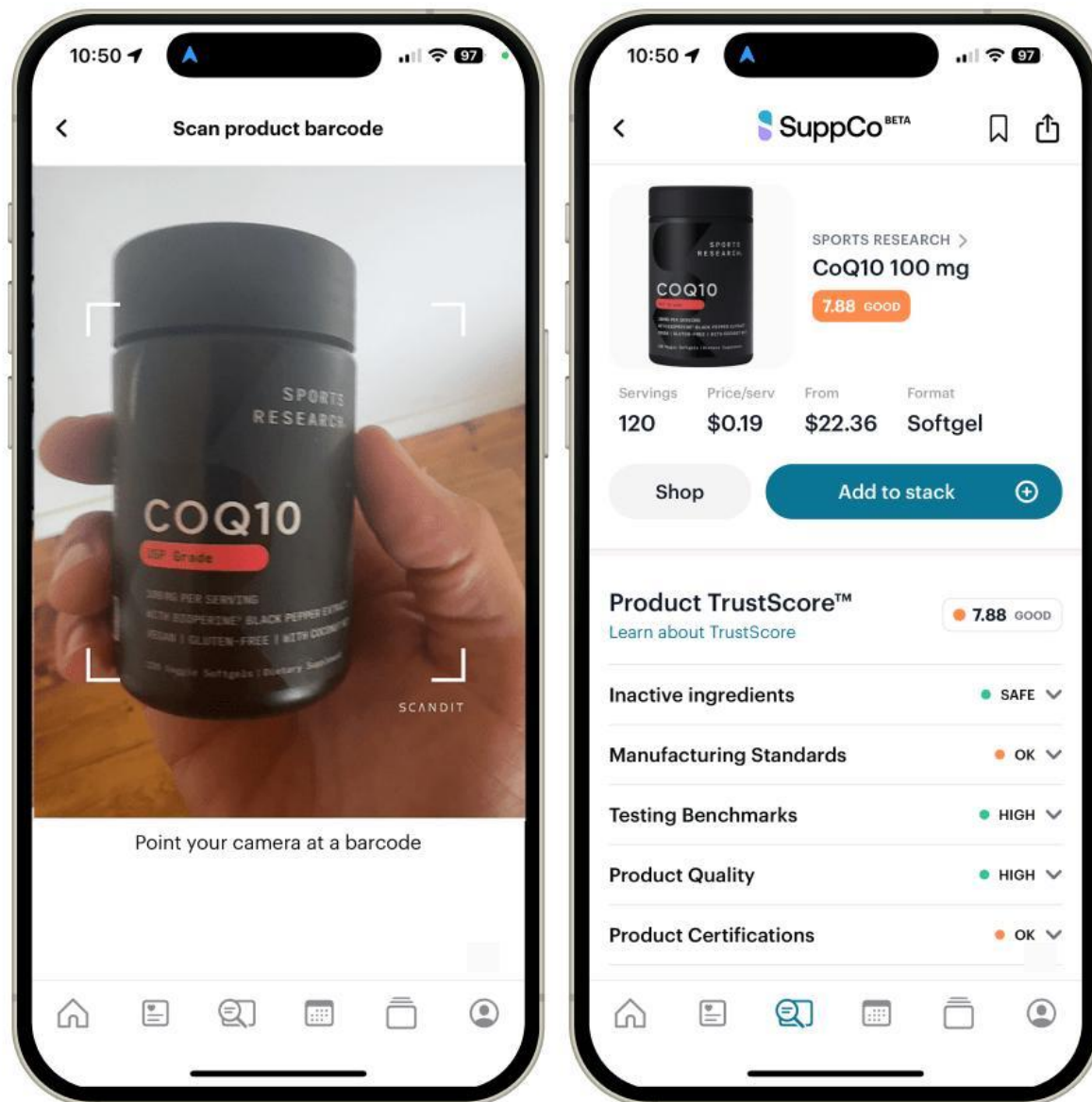


Identity and Potency Testing

#BOIFOI
They're
writing
your story...

#BOIFOI
They're
writing
your story...





#BOIFOI
They're
writing
your story...

#BOIFOI
They're
writing
your story...

NOW Testing Astaxanthin Products August 2023

Astaxanthin Brand Tested 2023	Size	Lot #	Label Potency	NOW HPLC Results	Alkemist ID only Results
Amazing Nutrition (NJ)	120 Sgels	AV-0122199	12 mg	0.6 mg	Pass
aSquared (misabeled 5%)	120 Sgels	221012	10 mg	0.6 mg	Pass
Best Naturals (NJ)	60 Sgels	052231	12 mg	0.4 mg	Fail
Bulk Supplements	180 Sgels	SG3304011	12 mg	13 mg	Pass
Cheeky Nutrition (UK)	180 Sgels	28829	12 mg	0.8 mg	Pass
Clear Formulas (FL)	180 Sgels	220310	10 mg	0.7 mg	Pass
Deal Supplement (CA)	90 Sgels	A302NB1	12 mg	11 mg	Pass
Doublewood (PA)	60 Sgels	2301009	12 mg	14 mg	Pass
Health Thru Nutrition (NY)	120 Sgels	1151 2230	12 mg	15 mg	Pass
Horbaach (NV)	120 Sgels	109331	12 mg	13 mg	Pass
Lilicare (+ 500mg Resveratrol)	60 Gummi	731078	24 mg	0 mg	Fail
Micro Ingredients (CA)	90 Sgels	M04A0323	12 mg	15 mg	Pass
NatuVitz (misabeled 5%) (FL)	120 Sgels	220406	10 mg	0.6 mg	Pass
NatureBell (CA)	120 Sgels	A301NB2	12 mg	11 mg	Pass
Neviss + Ashwagandha (CA)	2/75 Sgels	220620	24 mg	0.3 mg	Pass
Nootamin (+ Ashwagandha)	60 Vcaps	MI/ASTC/0223	15 mg	0 mg	Fail
Nootrilabs (+ Formula) (FL)	90 Vcaps	MI/APGC/0423	15 mg	0 mg	Fail
NOW	60 Vgels	3289649	12 mg	13 mg	Pass
Osasuna Liposomal (KY)	60 Sgels	UDT-089-8927	24 mg	0 mg	Fail
Research Labs (UT)	120 Sgels	220820	12 mg	4 mg	Pass
TerraVita (DE) (misabeled)	100 Caps	78-D86F2DE7	450 mg	0.1 mg	Fail
We Like Vits (misabeled 10%)	180 Sgels	41199A	10mg	0.3 mg	Pass

FNF Electrolyte Products

At Future Nutra Foundation, we believe supplement labels should reflect measurable reality. To evaluate accuracy and safety in the electrolyte category, we independently purchased leading products from retail channels and conducted blinded laboratory testing for mineral content and heavy metals. The data below compares real laboratory results to label claims, offering an objective view of product transparency and consistency.

Last Updated-02/10/2026

PUBLIC TRANSPARENCY REPORT

Δ⁹-THC Beverage Test Results

We purchased and independently lab-tested 21 popular hemp-derived beverages to verify their Δ⁹-THC label claims. Predictable dosing is essential for a safe consumer experience. See which brands deliver exactly what they promise.

OVERALL MARKET HEATMAP

Only 19% Of Products Met Their Claims.



#BOIFOI
They're
writing
your story...

The New York Times



The Fake Influencers Selling Wellness on Your Feed

The New York Times found hundreds of A.I.-generated doctors, healers and wellness influencers on social media touting the health benefits of supplements to American consumers. Many of these hyperrealistic looking ads promise medical miracles, and appear to be targeting older women, while making misleading health claims for a profit.

...

#BIFOI They're writing your story...

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your story...





Supplement Superhighway: Navigating Consumer Expectations and Media Headlines in a Fast-Paced Marketplace



Jessica Rubino

Senior Director,
Content Marketing
New Hope Network



Eric Pierce

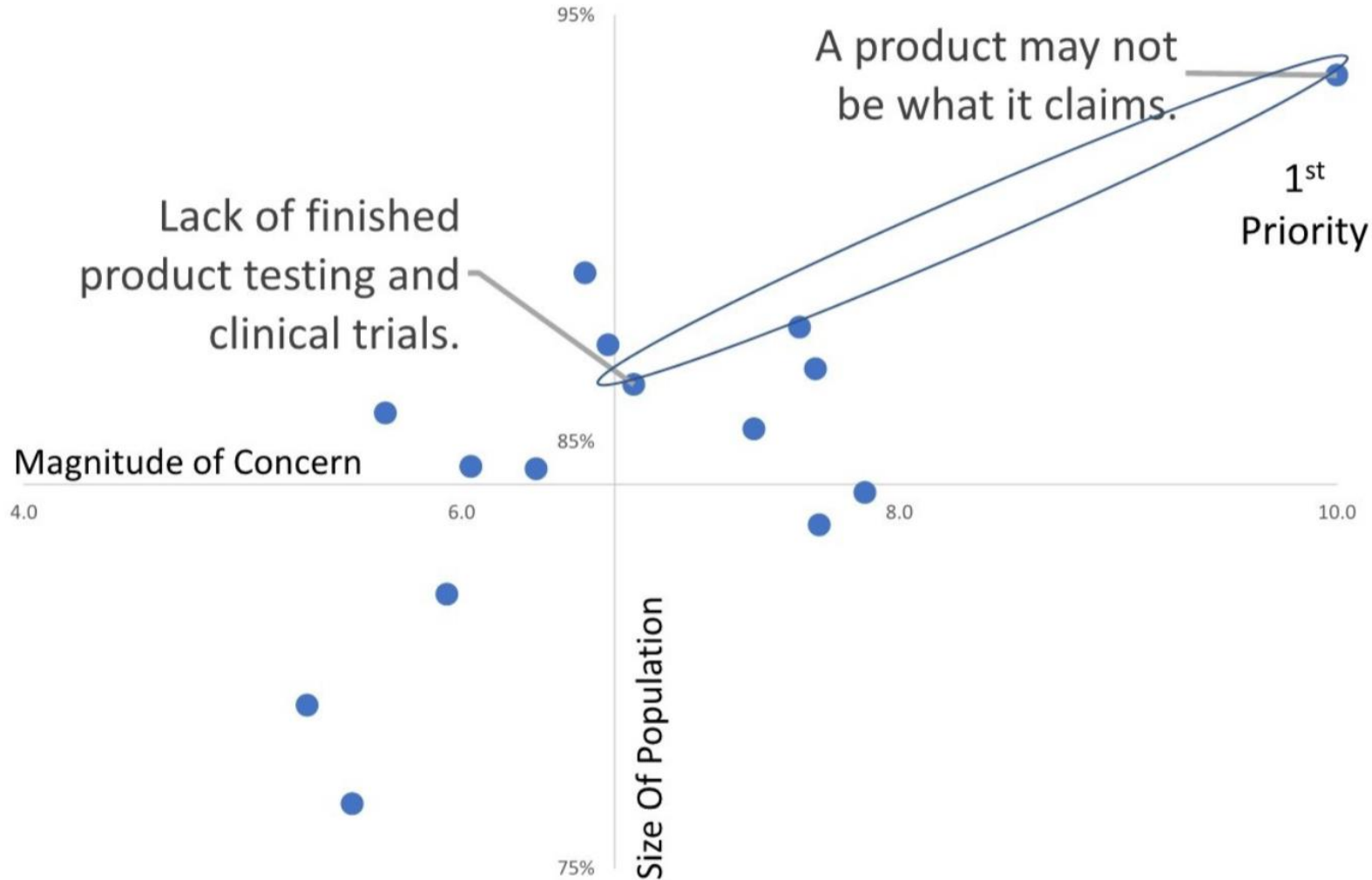
Vice President, Strategy & Insights,
New Hope Network,
NEXT Data & Insights

1st Priority: Adulteration & Finished Goods Testing

Consumers want to feel confident in what they are buying. They want to feel a sense of trust and security.

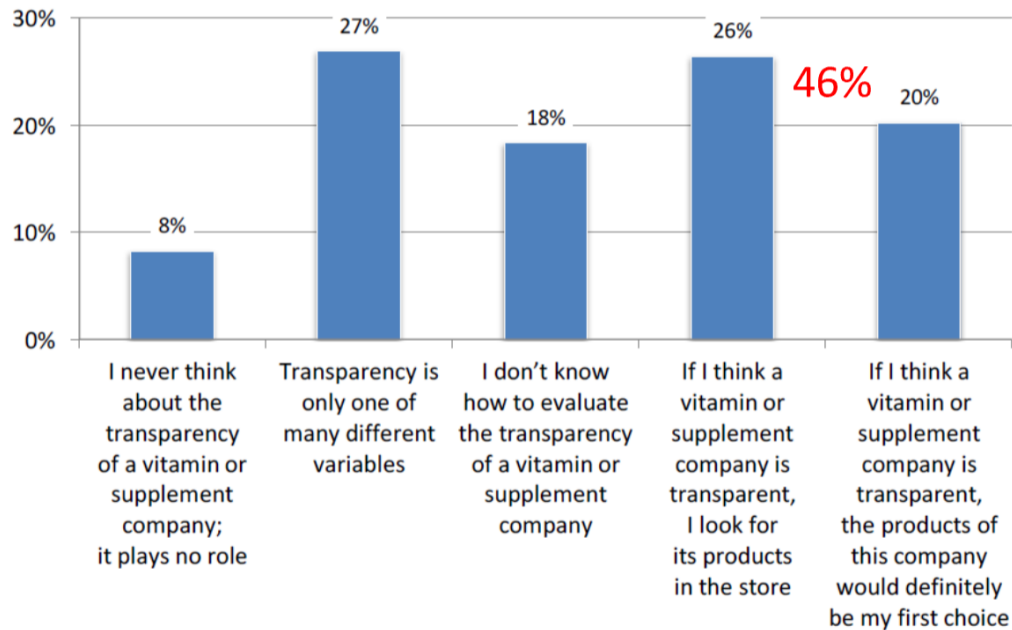
As they have historically, issues with adulteration and finished goods testing can have a negative impact on the industry and impact consumer trust and willingness to engage with the category.

We see here concerns about adulteration emerge as a top priority.



Transparency Means Quality

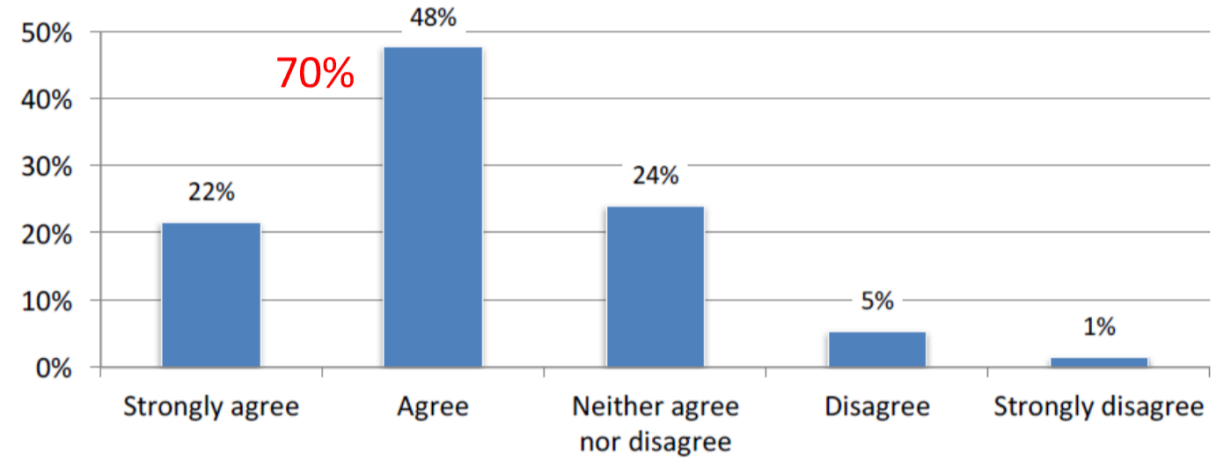
Figure 1-4: Vitamin and Supplement: Transparency and Shopping Habits



Q: Which of the following best describes your relationship to transparency of a vitamin or supplement company and your shopping habits when choosing vitamins or supplements?

Base n = 208; Source: Pure Branding, *The ROI of Transparency*, 2018

Figure 1-3: Vitamin and Supplement: Transparency and Perception of Quality



Q: Tell us how much you agree or disagree with this statement: Generally speaking, you believe the more transparent a vitamin or supplement company, the higher quality its products.

Base n = 208; Source: Pure Branding, *The ROI of Transparency*, 2018

Transparency Moves Consumers

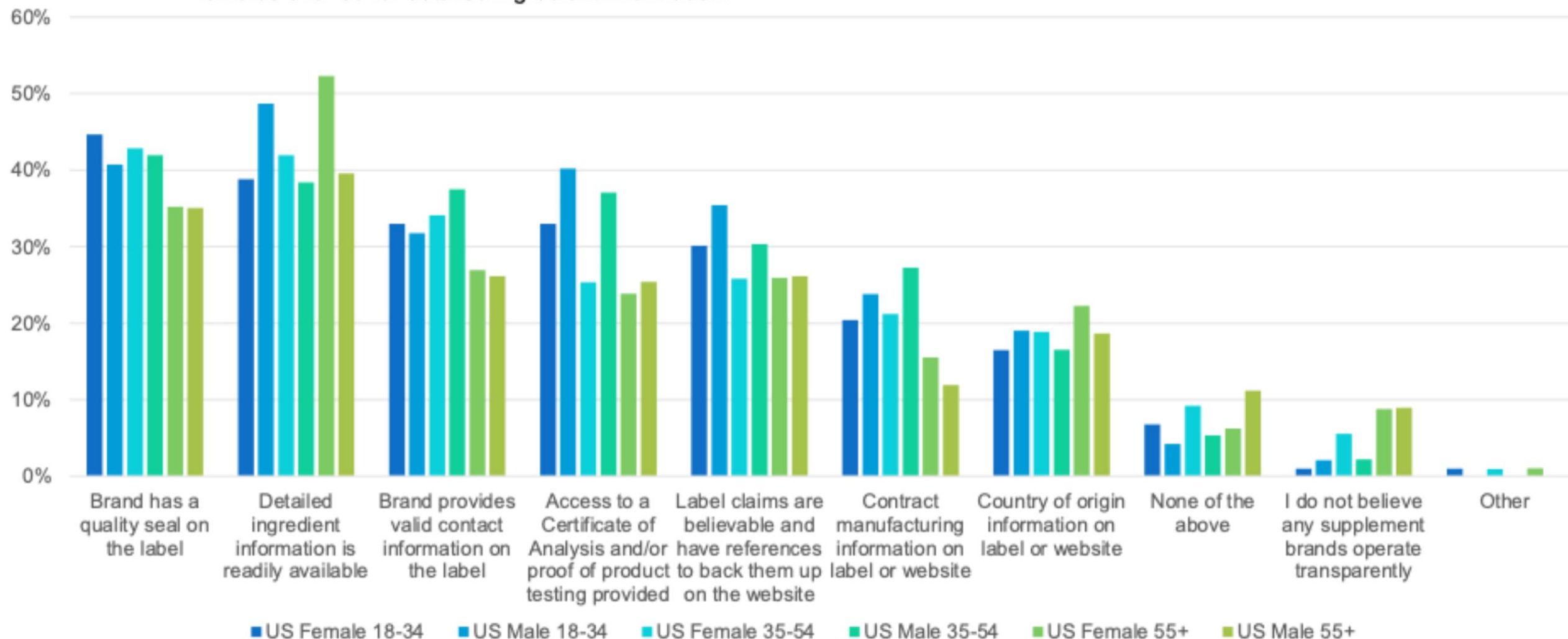
The ROI of Transparency: A Consumer Research Study - Pure Branding, Inc., November 2018

SIGNALS OF BRAND TRANSPARENCY: US, AGE & GENDER



Key Insight:

- US age & gender responses level out slightly but have more sharp outliers, males under 55 in particular along with females over 55 for detailed ingredient information.

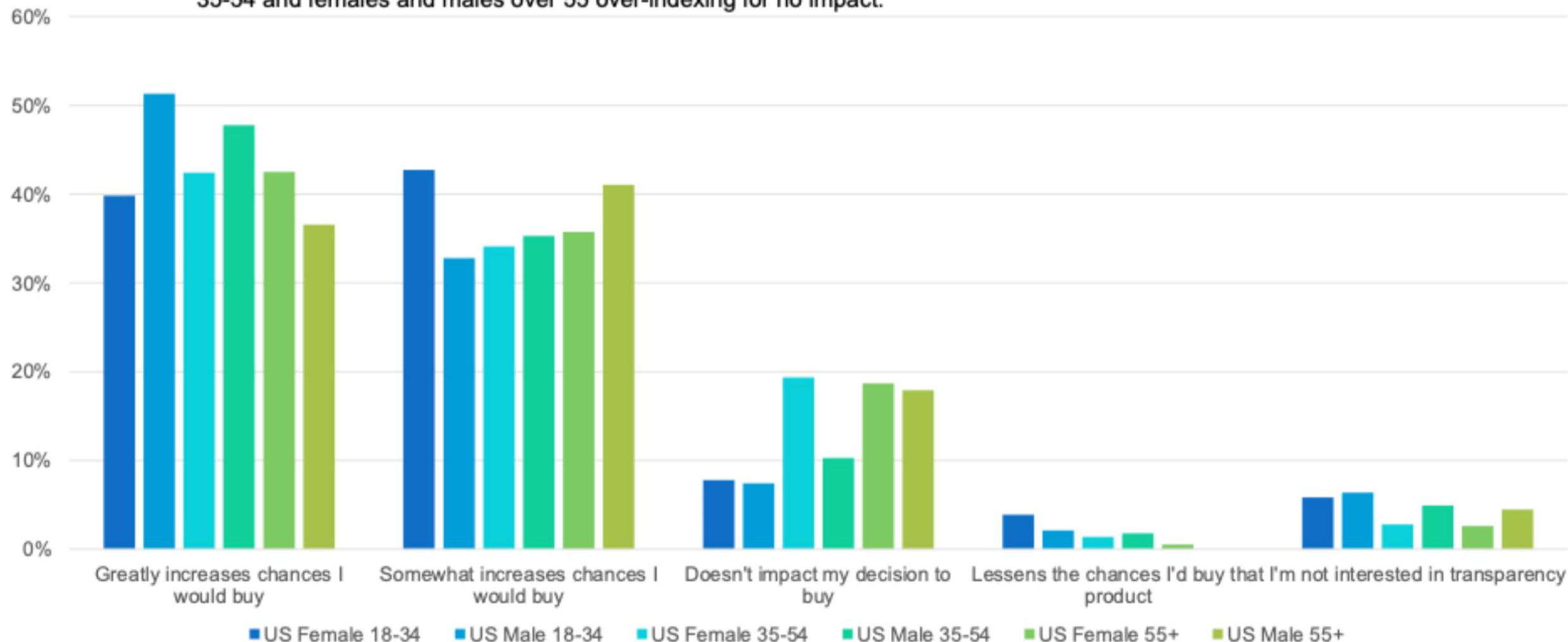


TRANSPARENCY PURCHASE INFLUENCE: US, AGE & GENDER



Key Insights:

- US responses have females and males 18-34 standing out more in the two positively influencing responses, with males 35-54 and females and males over 55 over-indexing for no impact.



Note: US Female 18-34 n=103, US Male 18-34 n=189, US Female 35-54 n=217, US Male 35-54 n=224, US Female 55+ n=193, US Male 55+ n=134. Question: "How likely are you to purchase supplements from a manufacturer that provides transparency information on its label or website?"

...
It's
Story
Time!!!



Elan's Super Biased Quality Index

A deliberately blunt scan of the public web.

One point each. Perfectly unfair. Directionally useful.

1

Uses the word “quality”

2

At least one paragraph about product quality

3

Dedicated quality page or quality story

4

Details product quality and labs/testing used

5

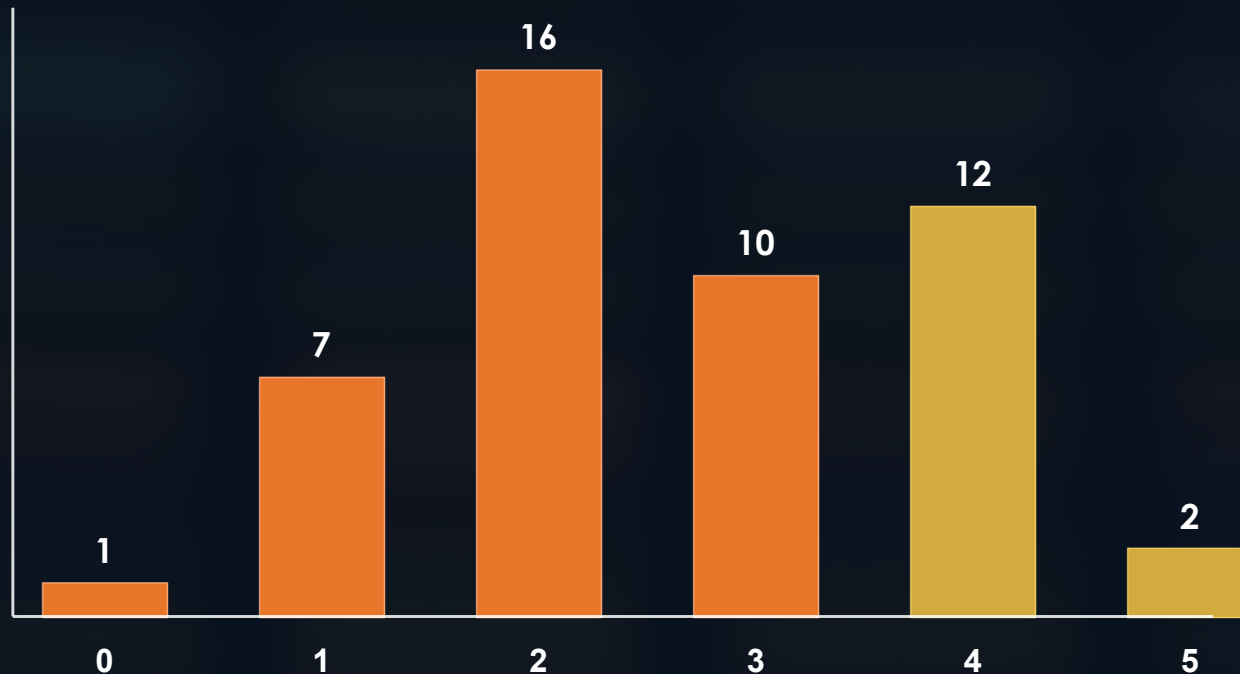
Unicorn: public COA/test results by lot or batch

AI can write this
story about your
company in
seconds.

Anonymous Score Distribution

Names removed here. Winners named next.

Score distribution



0 = hard to find the story 5 = public proof at the batch/lookup level

48 companies scanned

14 4+ point storytellers

2 lot/lookup proof

- 1 Uses the word "quality"
- 2 At least one paragraph about product quality
- 3 Dedicated quality page or quality story
- 4 Details labs/testing used
- 5 Public COA/test results by lot or lookup

Gaia Herbs

The traceability unicorn.

5/5

UNICORN



Why they scored

- Dedicated transparency story built around “Meet Your Herbs.”
- Consumers can enter the product ID and see origin, manufacturing date, plant parts and testing performed.
- The quality story connects farm practices, potency, purity and public verification.

STAGE TAKEAWAY

They do not just tell a quality story. They let the consumer look it up.



Quality



Story



Page



Proof



Lookup

Elan's Super Biased Quality Index: one point each, public web only.

Kaneka Nutrients

Ingredient authenticity gets a verification path.

5/5

UNICORN



Why they scored

- Dedicated quality-assurance process page with manufacturing and critical-control testing details.
- Ubiquinol Verified Program uses certified third-party labs verification.
- The quality seal / unique-ID concept gives brands a consumer-facing proof mechanism.

STAGE TAKEAWAY

Kaneka turns ingredient authenticity into a visible trust mechanism.



Quality



Story



Page



Proof



Lookup

Elan's Super Biased Quality Index: one point each, public web only.

Aloha Medicinals

Mushroom quality told like a supply-chain story.

4/5

STANDOUT



Why they scored

- Dedicated quality page with whole-food mushroom positioning and quality language.
- DNA-verified strains, USDA Organic status and third-party verification are explained.
- Public COA examples include lot numbers and analytical results, but the lookup path is not frictionless.

STAGE TAKEAWAY

Strong proof exists. The next move is making it easy for buyers to find by lot.



Quality



Story



Page



Proof



Lookup

Elan's Super Biased Quality Index: one point each, public web only.

Ancient Nutrition

COAs are visible, but not yet batch-navigable.

4/5

STANDOUT



Why they scored

- Public Certificates of Analysis page for select product categories.
- Clean supplement content explains third-party testing, GMPs and ingredient standards.
- Strong transparency signal, but no simple lot-number lookup was found in the public path.

STAGE TAKEAWAY

They publish receipts for some products. The unicorn is a lot-specific doorbell.



Quality



Story



Page



Proof



Lookup

Elan's Super Biased Quality Index: one point each, public web only.

Thorne

The most polished quality story in the room.

4/5

STANDOUT

THORNE

Why they scored

- Dedicated quality page with a clear testing architecture.
- Four testing rounds cover raw materials, in-process checks, finished products and stability.
- In-house labs and third-party testing are discussed, but no public lot COA lookup was found.

STAGE TAKEAWAY

World-class quality narrative. The missing chapter is consumer-facing batch proof.



Quality



Story



Page



Proof



Lookup

Elan's Super Biased Quality Index: one point each, public web only.

Important Caveat

The index rewards storytelling and access, not actual quality.

Several companies tied at 4/5.

The five slides before this are selected standouts because their public quality stories were especially easy to find, clear to understand, and useful to a buyer or consumer.

Other high scorers included ADM, Balchem, Fruit d'Or, Herbalife, Natural Remedies, PharmaLinea, Sabinsa, TSI Group and Wakunaga.

The lesson stays the same:

If your quality story is not visible, the market will assume there is no story.

My fellow comrades,

**There is an R missing from your ROI:
MARKETING YOUR QUALITY.**

**You already spend millions doing the right testing—then
bury the proof in a quality manager's desk.**

Take quality out of the closet.

**If you're doing it right, you're sitting on a marketing
goldmine—and you have the power to rebuild
consumer trust.**

