Patient, caregiver or curious newcomer

Start here whether you are new to the subject or already comfortable reading science. Learn how to identify a product, judge a claim and prepare questions for care. Technical words are explained as they appear; the glossary and linked readings let you go further.



Mara / fictional visitor

YOUR LEARNING JOURNEY

Leave with a short, useful appointment brief and a clearer distinction between a medicine, an investigational compound and an online claim.

Identify the preparation, distinguish measured benefits from promises, then prepare your care conversation.

Education cannot determine whether a treatment is appropriate for you. Compounded products are not FDA-approved; a research-use label is not evidence of safe human use.

Open the current online guide

Sources and related guides remain accessible on the website. All role paths are open to every reader.

Portrait: fictional illustration, not a real patient, professional reviewer or endorsement. This handbook provides education, not individual medical or legal advice.

Contents

Read in order for a foundation, or use the linked contents to find a specific topic. Page numbers refer to this edition.

SUGGESTED START

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3. Prepare a useful care conversation

Continue with the reading path and books, then record your findings in the learning worksheet.

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Know which product the evidence describes

A molecule name is a starting point, not a complete product description. Record the active ingredient, chemical form, formulation, route, manufacturer or compounder and the document date. Products using similar names may differ in ways that matter. A result for one preparation does not automatically establish the performance of another.

FDA approval concerns a particular drug product and its authorized labeling. A facility registration, product listing or National Drug Code does not mean FDA has approved the product. A company can have legitimate paperwork for one activity without every product or claim being authorized.

Compounded drugs are prepared under a different framework and are not FDA-approved. They can serve particular patient needs, but FDA does not review each compounded product for safety, effectiveness and quality before marketing in the way it reviews approved medicines.

Investigational means a product or use is being studied; it does not mean success is established. Research-use labeling concerns a claimed purpose and cannot establish suitability for human use. Keep regulatory status, analytical quality and clinical evidence as three separate entries. None can substitute for the other two.

Build a simple comparison: what the paper studied, what the official label describes, and what the current document or service names. Mark missing information rather than filling it with a brand assumption. This comparison is useful for a patient preparing questions and for a professional reviewing a brochure.

Worked learning example

Two documents use the same ingredient name. One describes an approved finished medicine; the other describes bulk powder with a laboratory report. The shared name does not make the powder an approved medicine. Ask what each document actually establishes before carrying claims between them.

READ THE SOURCE

FDA - Is It Really FDA Approved?

FDA - Compounding and FDA: Questions and Answers

Pharmacy types

Section 503A covers compounding for an identified individual patient, including by a pharmacist in a state-licensed pharmacy, subject to its conditions. Section 503B covers registered outsourcing facilities that remain subject to current good manufacturing practice (CGMP), a system of manufacturing quality requirements. These facilities can supply office stock for healthcare providers without an individual prescription, subject to applicable conditions. Neither pathway makes a compounded product FDA-approved. Registration is not approval of the facility’s products. The linked Pharmacist guide explains the differences in more depth.

Sources for this addition checked October 31, 2026.

READ THE SOURCE

FDA - 503A and 503B provisions

FDA - Compounding questions and answers

Continue: Pharmacist guide

Read a claim without losing its limits

Begin with one answerable question. “Does it improve wellbeing?” covers many different things. Pain, sleep, muscle strength, a blood measurement and hospital admission are separate outcomes. Write the exact substance, the people studied, the comparison and the outcome before deciding whether a finding answers your question.

An online experience is a report of what someone noticed. It can identify questions worth investigating, including possible harms. It usually cannot separate the substance from changes in training, food, other treatments, expectations or the natural course of a problem. Many similar posts still do not create a controlled comparison. Popularity and scientific certainty are different measurements.

Laboratory and animal experiments can investigate mechanisms and generate hypotheses. Human observational studies examine associations in real settings, with potential differences between groups. Randomized comparisons are designed to reduce those differences, but their usefulness still depends on execution, size, follow-up and the outcomes measured. The study design must fit the question; a small trial is not automatically a complete safety record.

Keep benefit and harm in the same notes. Record how many people were observed, how long they were followed, what events occurred and whether investigators considered them related to treatment. An event after treatment does not by itself establish causation. Conversely, an uncertain causal connection is not a reason to erase a serious event.

When reading numbers, retain the denominator. A hypothetical change from 2 in 100 to 1 in 100 is a one-percentage-point absolute reduction and a 50% relative reduction. Both descriptions concern the same comparison. Ask for uncertainty around estimates and whether the result was planned or selected from many analyses. A headline alone rarely supplies all of this.

Worked learning example

A post says a two-compound “stack” improved recovery. Studies of each ingredient separately cannot establish the effects or risks of that combination. Record the stack claim as a question, then look for research on that exact combination, outcome and population. An absent study means the question remains unanswered.

READ THE SOURCE

Testing Treatments - free evidence-literacy book

Prepare a useful care conversation

You do not need technical training to ask a precise question. Start with what you want to understand: the diagnosis being considered, the evidence for an advertised outcome, the identity of a product, or the plan for follow-up. Bring the original link or document so the clinician can see the exact claim.

Prepare a short record of current medicines and supplements, allergies, relevant history and previous reactions. Include products discussed online without assuming that a familiar name accurately describes their contents. The purpose is to make the conversation more complete, not to diagnose yourself from a checklist.

Ask what outcomes matter in your circumstances and how benefit and harm would be assessed. “My laboratory number changed” and “my health improved” are different statements. A test can be useful, but its meaning depends on the clinical question and context. Ask why a test is relevant and what its result could change.

Clarify the people involved. The platform, prescriber, dispensing pharmacy, manufacturer and testing laboratory may be different organizations. Ask who can answer clinical questions, who can clarify product identity, and how records or concerns reach the right person. A sales representative is not automatically the person responsible for your care.

Leave with a written understanding of what remains uncertain, the next discussion and the route for follow-up. Ask how unexpected symptoms are handled and what the service cannot manage remotely.

Worked learning example

Instead of asking only “Is this peptide good?”, bring a saved claim and ask: “What evidence supports this particular outcome in people with my circumstances, and what information about this product is still missing?” Record the answer and the source so you can revisit it later.

READ THE SOURCE

HHS - Preparing for a Telehealth Visit

FDA - Is It Really FDA Approved?

What a test report can and cannot tell you

A certificate of analysis, often shortened to COA, describes tests on a particular sample. Start with its sample or lot number, date and issuing laboratory. Ask how that sample connects to the preparation being discussed with you. A report for raw ingredient, a different batch or an unidentified sample leaves that connection unanswered.

Next, read the test names rather than the largest percentage. Identity asks what was detected; a purity result describes a specified measurement of impurities relative to the main material. Neither result, by itself, tells you the amount in each finished container. Microbial testing, stability and clinical benefit are different questions. A blank or absent result means the report has not answered that question.

For example, a fictional report says “identity consistent” and “99% chromatographic purity.” You can accurately say those results were reported for that sample. You cannot turn them into “this preparation is sterile, contains the claimed amount and will improve my health.” Ask the clinician or pharmacist to explain the report’s scope and connection to the actual preparation. A clear explanation separates what was measured, what remains unknown and which document could answer the remaining question.

Sources for this addition checked October 31, 2026.

READ THE SOURCE

Peer-reviewed methods - Peptide reference standards

Optional deeper reading: Analytical Lab guide - testing, methods and COA interpretation

Where to report a problem and how to check a pharmacy

FDA MedWatch accepts reports of adverse events and product-quality problems. Record the product name, manufacturer or compounder, lot if available, dates, what happened and relevant packaging or photographs; distinguish what you observed from what you suspect caused it. A report communicates a concern and does not itself prove causation.

Use FDA BeSafeRx to learn how to evaluate an online pharmacy, then follow FDA’s state-pharmacy directory to the relevant board’s license lookup. Match the legal name and address, check the current license record and contact the board when an entry is unclear. A license lookup and a product-approval record answer different questions.

Worked learning example - fictional

A package names a dispensing pharmacy different from the website brand. Look up the pharmacy’s legal name and address, not just the platform name. If reporting a damaged container, retain its lot number and describe the damage without assuming which organization caused it.

Sources for this addition checked October 31, 2026.

READ THE SOURCE

FDA - Reporting serious problems

FDA - BeSafeRx

FDA - State pharmacy license lookup directory

Reading path and books

1. Learn what counts as evidence

Separate personal stories, animal experiments and controlled human research before interpreting a benefit.

2. Check the product category

Approval belongs to a specific product and indication, not every item with a similar ingredient name.

3. Prepare a care conversation

Bring questions about identity, oversight and follow-up to a qualified clinician.

Continue in the Church Library

Choose the level that fits your background. Book links lead to the Library, where reading options and any affiliate disclosures are shown.

Testing Treatments - Evans, Thornton, Chalmers and Glasziou

Start with fair comparisons and uncertainty. The library entry includes an official free reading option. Published in 2011; use current official sources for regulatory questions.

The Body - Bill Bryson

An accessible introduction to human biology for readers who want context before technical papers. General science background, not a peptide treatment manual.

Browse all Library rooms

Examples in practice

These examples identify published resources and their uses; they are not evaluated services.

FDA - Is It Really FDA Approved?

Understand what approval, registration and listing do-and do not-establish.

FDA - BeSafeRx

Learn how to check an online pharmacy and find its state licensing record.

HHS - Preparing for a telehealth visit

Prepare your records, questions and connection before a remote appointment.

Questions and explanations

Was the result measured in people like me, or is that still unknown?

The answer depends on who entered the study and which outcome was measured. Compare participants' health condition, age range and other eligibility criteria with the question you want answered; a similar age alone does not make the evidence applicable. For example, a study measuring glucose in adults with diabetes does not directly establish improved athletic recovery in otherwise healthy gym members. If that second outcome or population was not studied, write "not established by this study" rather than assuming the benefit carries over.

Which exact product, formulation and indication does the approval cover?

Look for the exact named medicine, dosage form, route and indication in its official approval record and current label. An ingredient name or facility registration does not establish that a different preparation has that approval. For example, an approved finished injectable medicine and a vial of bulk material bearing the same ingredient name are different product descriptions. Record what the label covers and leave any proposed use outside that description as a separate question for the clinician.

Read the source: it really fda approved

Who can explain whether the information applies to my health circumstances?

A licensed clinician who knows your history can discuss whether the evidence addresses your circumstances; a pharmacist can clarify medicine identity and formulation questions. Bring the actual claim plus your medicines, allergies and relevant health history so the conversation starts from specific information. For example, if an advertisement promises better sleep, ask whether the cited study measured sleep and whether your existing medicines or sleep problem change the discussion. A sales reply or a fictional website character cannot replace that individual assessment.

Glossary

Comparator
The reference group or intervention against which an outcome is compared, such as placebo or another treatment.

Endpoint
An outcome defined for a study. A biological measurement and a patient-important outcome are not necessarily the same thing.

Formulation
The composition and presentation of a product, including ingredients beyond the active substance.

Adverse event
An unwanted medical occurrence during observation; occurrence does not itself establish a causal connection to treatment.

Investigational
Under investigation. This describes research status, not proof of safety or benefit.

COA
Certificate of analysis: a report of specified tests and results for an identified material or sample. Its meaning depends on scope and provenance.

Identity
Whether a material matches the named substance within the methods and comparisons used.

Purity
A method-dependent assessment of detected components; chromatographic peak-area purity is not automatically total mass purity.

Assay / content
A measurement of the amount of a specified substance, stated with units and a defined basis.

Potency
Biological activity assessed by a specified assay; the term is sometimes used differently, so inspect the report’s definition.

Sterility
The absence of viable microorganisms; interpreting a sterility-test result requires its sampling and method context.

Endotoxin
A component of certain bacteria that can provoke inflammatory reactions. Endotoxin testing is distinct from sterility testing.

Traceability
A documented connection to an origin or reference. Measurement traceability and supply-chain provenance are related but different questions.

Lot / batch
An identified production group. Matching this identifier helps connect a document to the material it describes.

Stability
How a product’s measured properties change over time under specified storage conditions.

Learning worksheet

Appointment preparation

Use these prompts to record what you understand, what remains uncertain and which source could answer the question.

Learning prompt	Filled-in fictional example
Appointment preparation	Fictional example: Claim: “better recovery.” Source: an animal experiment. Unanswered: benefit in people with my condition. Appointment question: does any human study address this outcome?

Write the claim you saw, its link and the date.

List your medicines, allergies and the health question you want answered.

Record what is known, what is uncertain and your most important concern.

Ask who handles follow-up, unexpected symptoms and questions after the visit.

Educational information, not individualized medical or legal advice.

Explore another perspective in the Community Center