



HERBAL SUPPLEMENTS

NGN NCLEX-RN PHARMACOLOGY INFOGRAPHIC

2026 Test Plan • NCJMM Clinical Judgment Framework



Herbs Covered in This Infographic

- Echinacea — immunostimulant (allergy + autoimmune trap)
- St. John's Wort — antidepressant (CYP450 INDUCER — #1 interaction herb)
- Ginkgo Biloba — cognition (bleeding G)
- Garlic — BP / lipids (bleeding G)
- Ginseng — stimulant / adaptogen (bleeding G + hypoglycemia)
- Ginger — antiemetic (bleeding G, safest in pregnancy ≤ 1 g)
- Black Cohosh — menopause (🚫 HEPATOTOXIC)
- Turmeric / Curcumin — anti-inflammatory (bleeding + liver + gallbladder)



THE 5 BLEEDING HERBS — #1 NCLEX PATTERN

Herbs that ↑ Bleeding — HOLD before surgery & with anticoagulants

- GINKGO — hold 2 wk preop
- GARLIC — hold 7-10 d preop
- GINGER — hold 1-2 wk preop
- GINSENG — hold 7 d preop
- + TURMERIC — hold 2 wk preop
- All interact with WARFARIN, HEPARIN, DOACS, ASPIRIN, NSAIDS, CLOPIDOGREL
- Classic trap: pt on warfarin starts any of these → INR/bleeding risk ↑



THE OUTLIERS — DIFFERENT DANGERS

Not all herbs bleed — know these unique risks

- ST. JOHN'S WORT → CYP450 inducer → LOWERS levels of warfarin, OCPs, digoxin, HIV & transplant meds; + serotonin syndrome with SSRIs
- ECHINACEA → ALLERGY + IMMUNE OVERSTIMULATION (avoid in autoimmune, HIV, transplant)
- BLACK COHOSH → HEPATOTOXICITY (liver failure reported)
- TURMERIC → bleeding + liver + gallbladder trap



MASTER COMPARISON TABLE — Rapid Review <60 Seconds

Use this cheat sheet to quickly differentiate the 8 high-yield herbs on NCLEX.

HERB	USE	#1 RISK	PRE-OP HOLD	KEY INTERACTION
Echinacea	Colds, immune	Allergy + immune flare	Not required	Immunosuppressants (hold)
St. John's Wort	Mild depression	Serotonin syndrome / ↓ drug levels	5 days	SSRIs, warfarin, OCPs, HIV meds
Ginkgo	Memory, PAD	BLEEDING	2 weeks	Warfarin, ASA, NSAIDs
Garlic	↓ BP, ↓ LDL	BLEEDING + ↓ BP	7–10 days	Warfarin, saquinavir, antiHTN
Ginseng	Fatigue, DM	Hypoglycemia + bleeding	7 days	Insulin, warfarin, MAOIs
Ginger	Nausea (preg)	BLEEDING (high dose)	1–2 weeks	Warfarin, NSAIDs
Black Cohosh	Menopause	🚫 HEPATOTOXICITY	Not required	Acetaminophen, statins
Turmeric	Inflammation, OA	Bleed + liver + GB	2 weeks	Warfarin, gallstone meds

ECHINACEA

Class: Immunostimulant Herbal Supplement (Coneflower)

System: Immune / Infectious Disease

1. DRUG OVERVIEW — WHY WE GIVE IT

Key Indications & Clinical Use

- Self-use: prevention & treatment of upper respiratory infections (common cold, flu)
- Minor wound healing (topical folk use)
- NOT FDA-approved — no established therapeutic dose
- Evidence weak — does NOT reliably shorten colds in trials

2. MECHANISM OF ACTION

How It Changes Physiology

- ↑ Phagocyte activity → stimulates macrophages & NK cells
- ↑ Cytokine & interferon release → non-specific immune stimulation
- May inhibit hyaluronidase → reduces tissue spread of pathogens
- Net effect: IMMUNE SYSTEM ACTIVATION

3. THERAPEUTIC EFFECTS — Is It Working?

Expected Improvements

- Subjective ↓ cold severity/duration (pt reports feeling better sooner)
- No objective vital sign / lab marker to track

4. SIDE EFFECTS & ADVERSE REACTIONS

COMMON

- GI upset, nausea
- Unpleasant taste/tingling tongue
- Rash, pruritus
- Dizziness, headache

SERIOUS / LIFE-THREATENING

- ANAPHYLAXIS (esp. ragweed/daisy/marigold/chrysanthemum allergy)
- Hepatotoxicity with >8 weeks continuous use
- Worsening of autoimmune disease flares
- Immune suppression with chronic long-term use (paradox)

5. PRIORITY NURSING CONSIDERATIONS

ASSESS • MONITOR • HOLD • NOTIFY

- ASSESS: allergies to ragweed/Asteraceae family → HOLD if present
- ASSESS: autoimmune or immunocompromised status
- CONTRAINDICATIONS: HIV/AIDS, TB, MS, RA, lupus, leukemia, organ transplant
- HOLD with: immunosuppressants (cyclosporine, corticosteroids, methotrexate)
- LIMIT duration: do NOT use >8 weeks continuously
- NOTIFY provider before ANY surgery or new medication

6. LABS & DIAGNOSTICS

Monitor & Interpret

- LFTs (AST/ALT) if use >8 weeks — watch for hepatotoxicity
- CBC if autoimmune history
- No routine monitoring labs required

7. ADMINISTRATION & SAFETY

Route • Timing • High-Alert Precautions

- Oral: capsule, tablet, tincture, tea
- Topical: creams for wound care
- Timing: at first sign of cold symptoms
- NOT for prophylaxis long-term — reduces effectiveness

8. PATIENT EDUCATION

What the Patient MUST Know

- Stop immediately & seek care if: rash, swelling, SOB, wheezing → anaphylaxis
- Do NOT take if you have autoimmune disease or take immunosuppressants
- Do NOT take for more than 8 weeks in a row
- Always tell every provider you are taking this herb
- Not for children under 12 without provider approval

9. NCLEX TEST TRAPS

Common Confusions & Priority Pitfalls

- Echinacea STIMULATES immunity — DANGEROUS in HIV, TB, autoimmune, transplant patients
- Classic trap: pt on cyclosporine after transplant adds Echinacea → REJECTION RISK
- Allergy cross-reactivity: ragweed = Echinacea allergy
- Students confuse 'natural' with 'safe' — not safe in immunocompromised

10. MEMORY BOOSTERS

Mnemonics & Quick Recall

- ECHINACEA = 'ECHO the immune system' → amplifies it
- 4 A's to AVOID: AIDS, Autoimmune, Allergy (ragweed), After-transplant
- Remember: if pt is on any drug ending in '-mab', '-cept', or cyclosporine → STOP

CLINICAL JUDGMENT SNAPSHOT

Think Like the NCLEX

- #1 PRIORITY RISK → Anaphylaxis + immune overstimulation in autoimmune/transplant patients
- WHAT HARMS FIRST → Airway compromise from allergic reaction OR transplant rejection
- FIRST NURSING ACTION → ASSESS for ragweed/daisy allergy & autoimmune/transplant history BEFORE administering

ST. JOHN'S WORT

Class: Herbal Antidepressant (*Hypericum perforatum*)

System: Neuro / Psychiatric

1. DRUG OVERVIEW — WHY WE GIVE IT

Key Indications & Clinical Use

- Self-use: MILD to moderate depression
- Sometimes used for anxiety, insomnia, SAD
- NOT approved for major depressive disorder
- 🚫 MOST DANGEROUS HERB for drug interactions — CYP450 inducer

2. MECHANISM OF ACTION

How It Changes Physiology

- Inhibits reuptake of serotonin, norepinephrine, dopamine, GABA
- Similar action to SSRIs → ↑ synaptic serotonin
- Potent inducer of CYP3A4, CYP2C9, P-glycoprotein
- → SPEEDS UP metabolism of many drugs → ↓ their levels → treatment failure

3. THERAPEUTIC EFFECTS — Is It Working?

Expected Improvements

- ↓ depressive symptoms over 2-4 weeks
- Improved mood, sleep, appetite
- Effect comparable to low-dose SSRI in MILD depression only

4. SIDE EFFECTS & ADVERSE REACTIONS

COMMON

- Photosensitivity (severe sunburn risk)
- GI upset, dry mouth
- Dizziness, fatigue, headache
- Restlessness, vivid dreams

🚫 SERIOUS / LIFE-THREATENING

- 🚫 SEROTONIN SYNDROME with SSRIs, SNRIs, MAOIs, triptans, tramadol
- 🚫 Loss of efficacy: warfarin, digoxin, OCPs, HIV meds, transplant drugs
- Unintended pregnancy (OCP failure)
- Hypertensive crisis with MAOIs / tyramine foods
- Suicidal ideation (untreated depression)

5. PRIORITY NURSING CONSIDERATIONS

ASSESS • MONITOR • HOLD • NOTIFY

- ASSESS all current medications — SJW interacts with >50% of prescription drugs
- HOLD: with SSRIs, SNRIs, MAOIs, triptans, tramadol, linezolid, lithium
- CONTRAINDICATIONS: organ transplant, HIV, bipolar, pregnancy, breastfeeding
- MONITOR: signs of serotonin syndrome (hyperthermia, clonus, agitation, diaphoresis)
- NOTIFY: before surgery — stop 5 days preop (bleeding + anesthesia interaction)
- TAPER don't stop abruptly — discontinuation symptoms possible

6. LABS & DIAGNOSTICS

Monitor & Interpret

- INR if on warfarin — SJW ↓ INR → clot risk
- Drug levels: digoxin, cyclosporine, tacrolimus, HIV antivirals (all will be LOW)
- LFTs periodically with chronic use
- Pregnancy test — OCPs become unreliable

7. ADMINISTRATION & SAFETY

Route • Timing • High-Alert Precautions

- Oral: capsules, tablets, tea, tincture
- Timing: with food to reduce GI upset
- Full effect: 4-6 weeks
- Avoid direct sun — use sunscreen, protective clothing

8. PATIENT EDUCATION

What the Patient MUST Know

- Tell EVERY provider & pharmacist you take this herb
- Use backup contraception — the pill may fail
- Avoid tyramine foods (aged cheese, cured meats, wine) if on MAOIs
- Wear SPF 30+ and protective clothing outdoors
- Seek ER immediately: high fever + muscle twitching + confusion = serotonin syndrome
- Never combine with any prescription antidepressant

9. NCLEX TEST TRAPS

Common Confusions & Priority Pitfalls

- NCLEX LOVES SJW + warfarin → ↓ INR → clot (NOT bleeding like the G-herbs!)

- Pt on OCPs + SJW → teach backup contraception → #1 priority teaching
- Serotonin syndrome from SJW + SSRI is a classic priority question
- Students forget SJW induces CYP450 → LOWERS drug levels (opposite of most interactions)
- 'I take St. John's Wort and just started Zoloft' → HOLD Zoloft, notify provider NOW

10. MEMORY BOOSTERS

Mnemonics & Quick Recall

- SJW = 'Speeds Job of metabolism' (CYP3A4 inducer)
- SHINES (photosensitivity) + SPEEDS (CYP450) + SEROTONIN (syndrome risk)
- Think: 'St. John ROBS the pharmacy' → steals drug levels from warfarin, OCPs, digoxin, cyclosporine, HIV meds

CLINICAL JUDGMENT SNAPSHOT

Think Like the NCLEX

- #1 PRIORITY RISK → Serotonin syndrome OR loss of critical drug efficacy (warfarin, OCPs, transplant meds, HIV meds)
- WHAT HARMS FIRST → Hyperthermia/seizure from serotonin syndrome OR thrombotic event from subtherapeutic warfarin
- FIRST NURSING ACTION → OBTAIN FULL MEDICATION RECONCILIATION — identify interacting drugs & notify provider before first dose

GINKGO BILOBA

Class: Herbal Cognitive Enhancer / Antiplatelet

System: Neuro / Hematologic

1. DRUG OVERVIEW — WHY WE GIVE IT

Key Indications & Clinical Use

- Self-use: memory enhancement, dementia, early Alzheimer's
- Peripheral artery disease (intermittent claudication)
- Tinnitus, vertigo, macular degeneration
- Evidence: modest cognitive benefit at best

2. MECHANISM OF ACTION

How It Changes Physiology

- ↑ Cerebral & peripheral blood flow → vasodilation
- Inhibits platelet-activating factor (PAF) → ↓ platelet aggregation
- Antioxidant / free-radical scavenger
- Net effect: VASODILATION + BLEEDING RISK

3. THERAPEUTIC EFFECTS — Is It Working?

Expected Improvements

- Subjective ↑ memory, concentration, alertness
- ↑ pain-free walking distance in PAD
- ↓ tinnitus in some pts

4. SIDE EFFECTS & ADVERSE REACTIONS

COMMON

- Headache, dizziness
- GI upset, nausea
- Palpitations
- Mild rash

🚑 SERIOUS / LIFE-THREATENING

- 🚑 SPONTANEOUS BLEEDING — intracranial, GI, post-op
- 🚑 Stroke / subdural hematoma reported
- Seizures (esp. with raw/unroasted seeds)
- Severe allergic reaction

5. PRIORITY NURSING CONSIDERATIONS

ASSESS • MONITOR • HOLD • NOTIFY

- ASSESS bleeding risk — bruising, bleeding gums, melena, petechiae
- HOLD: with warfarin, heparin, DOACs, aspirin, NSAIDs, clopidogrel
- HOLD: 2 WEEKS before surgery or invasive procedures
- CONTRAINDICATIONS: bleeding disorders, seizure history, pregnancy
- MONITOR: PT/INR, PTT, CBC (H&H, platelets), neuro status
- NOTIFY provider for any new bruising, bleeding, or neuro changes

6. LABS & DIAGNOSTICS

Monitor & Interpret

- PT/INR, aPTT — baseline & periodic
- Platelet count
- H&H — watch for silent GI bleed
- No specific therapeutic drug level

7. ADMINISTRATION & SAFETY

Route • Timing • High-Alert Precautions

- Oral: standardized extract (EGb 761) most studied
- Timing: with meals
- Takes 4-6 weeks for effect
- NEVER use raw ginkgo seeds — ginkgotoxin → seizures

8. PATIENT EDUCATION

What the Patient MUST Know

- STOP 2 weeks before any surgery, dental work, or invasive procedure
- Report: headache, vision changes, weakness → could be intracranial bleed
- Use electric razor & soft toothbrush — ↑ bleeding risk
- Do NOT combine with aspirin, NSAIDs, or blood thinners
- Avoid if seizure history

9. NCLEX TEST TRAPS

Common Confusions & Priority Pitfalls

- Ginkgo + warfarin = CLASSIC NCLEX question → #1 risk: HEMORRHAGE
- Pt scheduled for surgery in 1 week taking ginkgo → HOLD + notify surgeon (2-wk rule)
- Confused with SJW — SJW lowers warfarin; Ginkgo increases bleed risk
- Post-op confusion + H/A + taking ginkgo → think subdural hematoma

10. MEMORY BOOSTERS

Mnemonics & Quick Recall

- GINKGO = 'Get the blood GO-ing' → thins blood, improves flow
- One of the 5 bleeding G's: Ginkgo, Garlic, Ginger, Ginseng, + Green tea
- Ginkgo Biloba → Better Blood flow → Bleeding Beware

CLINICAL JUDGMENT SNAPSHOT

Think Like the NCLEX

- #1 PRIORITY RISK → Hemorrhage (intracranial, GI, surgical)
- WHAT HARMS FIRST → Catastrophic bleed — intracranial in elderly, surgical in pre-op pts
- FIRST NURSING ACTION → ASSESS bleeding risk & current anticoagulants/antiplatelets; HOLD drug and notify surgeon 2 weeks preop

GARLIC

Class: Herbal Antihypertensive / Antilipemic (*Allium sativum*)

System: Cardiovascular

1. DRUG OVERVIEW — WHY WE GIVE IT

Key Indications & Clinical Use

- Self-use: hypertension, hyperlipidemia, atherosclerosis prevention
- Immune support, antimicrobial (folk use)
- Evidence: modest BP & cholesterol reduction
- Active compound: allicin

2. MECHANISM OF ACTION

How It Changes Physiology

- Inhibits HMG-CoA reductase → ↓ cholesterol synthesis
- ↓ Platelet aggregation → antiplatelet effect
- Vasodilation via nitric oxide release → ↓ BP
- Net effect: ↓ BP, ↓ LDL, ↑ BLEEDING RISK

3. THERAPEUTIC EFFECTS — Is It Working?

Expected Improvements

- ↓ Systolic BP ~5-10 mmHg
- ↓ LDL 5-15%, modest ↑ HDL
- ↓ Platelet aggregation (lab value)

4. SIDE EFFECTS & ADVERSE REACTIONS

COMMON

- Halitosis, body odor
- GI upset, heartburn, flatulence
- Mouth/esophageal irritation
- Dermatitis (topical use)

⚠️ SERIOUS / LIFE-THREATENING

- ⚠️ BLEEDING — GI, post-op, spontaneous
- Severe hypotension if combined with antihypertensives
- Allergic reaction / asthma
- Reduces saquinavir (HIV) effectiveness

5. PRIORITY NURSING CONSIDERATIONS

ASSESS • MONITOR • HOLD • NOTIFY

- ASSESS: bleeding, bruising, BP, anticoagulant use
- HOLD: with warfarin, heparin, aspirin, NSAIDs, DOACs
- HOLD: 7-10 DAYS before surgery
- CONTRAINDICATIONS: bleeding disorders, pre-op, pregnancy (high doses), saquinavir use
- MONITOR: BP, INR, platelet function
- NOTIFY provider if bruising, epistaxis, melena, hypotension

6. LABS & DIAGNOSTICS

Monitor & Interpret

- PT/INR — may prolong
- Lipid panel (LDL, HDL, total cholesterol, triglycerides)
- BP trends
- Bleeding time

7. ADMINISTRATION & SAFETY

Route • Timing • High-Alert Precautions

- Oral: fresh cloves, powder, aged extract, oil capsules
- Enteric-coated tablets ↓ GI upset
- Timing: with food
- Aged garlic extract = more consistent dosing

8. PATIENT EDUCATION

What the Patient MUST Know

- Stop 7-10 days before surgery or dental procedures
- Report bleeding, bruising, black stools, dizziness
- Do not replace prescribed antihypertensives or statins
- Expect breath & body odor
- Recheck BP & cholesterol at intervals

9. NCLEX TEST TRAPS

Common Confusions & Priority Pitfalls

- Pt on warfarin adds garlic → ↑ INR → bleeding (same family as ginkgo)
- Garlic + antihypertensive → orthostatic hypotension → FALL RISK
- Pt on saquinavir + garlic → ↓ HIV drug level → VIRAL REBOUND
- Don't confuse with 'food amount' — supplement doses are much higher



10. MEMORY BOOSTERS

Mnemonics & Quick Recall

- Garlic = 'Good for vessels, Gnarly for bleeding'
- 4 B's of Garlic: ↓ BP, ↓ Bad cholesterol, ↑ Bleeding, Bad breath
- One of the bleeding G's (Ginkgo, Garlic, Ginger, Ginseng)



CLINICAL JUDGMENT SNAPSHOT

Think Like the NCLEX

- #1 PRIORITY RISK → Hemorrhage (esp. with anticoagulants or pre-op) + severe hypotension
- WHAT HARMS FIRST → Bleeding in anticoagulated pt OR fall/syncope from added hypotensive effect
- FIRST NURSING ACTION → ASSESS medication list for anticoagulants/antihypertensives & surgical plans; HOLD 7-10 days pre-op

GINSENG (PANAX)

Class: Herbal Adaptogen / Stimulant

System: Endocrine / Cardiovascular

1. DRUG OVERVIEW — WHY WE GIVE IT

Key Indications & Clinical Use

- Self-use: fatigue, stress, cognitive performance, immune support
- Erectile dysfunction (Korean red ginseng)
- Type 2 DM — lowers blood glucose
- Two types: Panax (Asian) & American ginseng (both lower BG)

2. MECHANISM OF ACTION

How It Changes Physiology

- Ginsenosides → modulate HPA axis → stress adaptation
- ↑ Insulin sensitivity → ↓ blood glucose
- Mild antiplatelet activity
- CNS stimulation → ↑ alertness
- Estrogenic activity

3. THERAPEUTIC EFFECTS — Is It Working?

Expected Improvements

- ↑ Energy, ↓ fatigue (subjective)
- ↓ Fasting & postprandial glucose
- Mild ↑ immune markers

4. SIDE EFFECTS & ADVERSE REACTIONS

COMMON

- Insomnia, nervousness, jitteriness
- Headache, tachycardia, palpitations
- ↑ or ↓ BP (variable)
- GI upset, diarrhea
- Mastalgia, menstrual changes

SERIOUS / LIFE-THREATENING

- 🚫 HYPOGLYCEMIA — esp. with insulin, sulfonylureas, metformin
- 🚫 BLEEDING with anticoagulants
- Hypertensive crisis with MAOIs (Nardil, Parnate)
- Mania / psychosis (rare)
- Stevens-Johnson syndrome (rare)

5. PRIORITY NURSING CONSIDERATIONS

ASSESS • MONITOR • HOLD • NOTIFY

- ASSESS: BG, BP, HR, sleep, bleeding signs, mood
- HOLD: with warfarin, insulin, sulfonylureas, MAOIs, stimulants, digoxin
- HOLD: 7 DAYS before surgery
- CONTRAINDICATIONS: uncontrolled HTN, bipolar/mania, pregnancy, hormone-sensitive cancers (breast, uterine), insomnia
- MONITOR: BG q4-6h if diabetic, BP, INR
- NOTIFY for hypoglycemia, chest pain, severe HTN

6. LABS & DIAGNOSTICS

Monitor & Interpret

- Blood glucose & HbA1c — may drop significantly
- PT/INR
- BP & HR trends
- TSH (estrogenic effects)

7. ADMINISTRATION & SAFETY

Route • Timing • High-Alert Precautions

- Oral: capsules, tablets, tea, extract
- Timing: morning (avoid evening → insomnia)
- Cycle use: 2-3 weeks on, 1-2 weeks off (prevent 'ginseng abuse syndrome')
- Avoid taking with caffeine

8. PATIENT EDUCATION

What the Patient MUST Know

- Diabetic pts: monitor BG more often — risk for hypoglycemia
- Carry fast-acting glucose source
- Report chest pain, palpitations, severe HA
- Do NOT combine with MAOIs, stimulants, or warfarin
- Stop 7 days before surgery
- Do NOT take if hormone-sensitive cancer history

9. NCLEX TEST TRAPS

Common Confusions & Priority Pitfalls

- Diabetic + insulin + ginseng = HYPOGLYCEMIA (#1 NCLEX trap)
- 'I feel shaky and sweaty' in diabetic on ginseng → check BG FIRST
- Ginseng + warfarin = another bleeding G
- Ginseng + MAOI = hypertensive crisis / mania
- Students miss estrogenic effect → contraindicated in breast CA

10. MEMORY BOOSTERS

Mnemonics & Quick Recall

- GINSENG = 'Gives Insulin-like Nudge, Stimulates, Elevates Nerves, Gory bleeds'
- One of the bleeding G's
- Think: 'Ginseng = Energy + Euglycemia ↓' — stimulant that LOWERS BG

CLINICAL JUDGMENT SNAPSHOT

Think Like the NCLEX

- #1 PRIORITY RISK → Hypoglycemia in diabetics + bleeding + hypertensive crisis with MAOIs
- WHAT HARMS FIRST → Severe hypoglycemia (seizure/coma) in diabetics — happens FAST
- FIRST NURSING ACTION → CHECK BLOOD GLUCOSE first in any symptomatic diabetic taking ginseng; reconcile diabetes/BP/anticoagulant meds

GINGER

Class: Herbal Antiemetic (*Zingiber officinale*)

System: GI / Musculoskeletal

1. DRUG OVERVIEW — WHY WE GIVE IT

Key Indications & Clinical Use

- Self-use: nausea (pregnancy, motion sickness, chemo, post-op)
- Osteoarthritis pain
- Dyspepsia, bloating
- Best-evidenced use: N/V of pregnancy (ACOG accepted)

2. MECHANISM OF ACTION

How It Changes Physiology

- Blocks 5-HT₃ receptors in GI tract → ↓ nausea
- ↑ Gastric motility → ↓ bloating & dyspepsia
- Inhibits COX-1 & thromboxane synthetase → antiplatelet, anti-inflammatory
- Net effect: ANTIEMETIC + BLEEDING RISK

3. THERAPEUTIC EFFECTS — Is It Working?

Expected Improvements

- ↓ Nausea/vomiting episodes
- ↓ Joint pain & stiffness (OA)
- ↓ Dysmenorrhea pain

4. SIDE EFFECTS & ADVERSE REACTIONS

COMMON

- Heartburn, belching, mouth irritation
- Mild diarrhea
- Dermatitis (topical)

🚨 SERIOUS / LIFE-THREATENING

- 🚨 BLEEDING with anticoagulants
- Arrhythmias at very high doses
- Hypoglycemia (mild)
- Possible uterine stimulation at high doses (pregnancy concern)

5. PRIORITY NURSING CONSIDERATIONS

ASSESS • MONITOR • HOLD • NOTIFY

- ASSESS: bleeding, bruising, anticoagulant use, pregnancy status
- HOLD: with warfarin, heparin, NSAIDs, aspirin at high herbal doses
- HOLD: 1-2 weeks before surgery
- CONTRAINDICATIONS (high dose): gallstones, bleeding disorders, pre-op
- MONITOR: INR, BG, bleeding signs
- PREGNANCY: ≤ 1 g/day is generally acceptable for N/V (check with OB)

6. LABS & DIAGNOSTICS

Monitor & Interpret

- PT/INR if anticoagulated
- Blood glucose in diabetics
- No specific drug level

7. ADMINISTRATION & SAFETY

Route • Timing • High-Alert Precautions

- Oral: capsules, tea, candied, fresh, syrup
- N/V of pregnancy: 250 mg PO QID
- Motion sickness: 1 g 30-60 min before travel
- Timing: before meals or at symptom onset

8. PATIENT EDUCATION

What the Patient MUST Know

- Pregnancy: keep ≤ 1 g/day; tell OB provider
- Stop 1-2 weeks before surgery
- Report any unusual bleeding/bruising
- Not a substitute for prescribed antiemetics in chemo — adjunct only
- Watch for hypoglycemia if diabetic

9. NCLEX TEST TRAPS

Common Confusions & Priority Pitfalls

- Ginger + warfarin = bleeding G family
- Pregnant pt on warfarin/heparin asking about ginger → caution + provider consult
- Chemo pt substituting ginger for ondansetron → not equivalent
- Don't confuse dietary amounts with therapeutic herbal doses

10. MEMORY BOOSTERS

Mnemonics & Quick Recall

- GINGER = 'Great for nausea, Gives bleeding'
- One of the bleeding G's (Ginkgo, Garlic, Ginseng, Ginger)
- Safest 'G' for pregnancy at low dose — but still stop pre-op

CLINICAL JUDGMENT SNAPSHOT

Think Like the NCLEX

- #1 PRIORITY RISK → Bleeding with anticoagulants + excess uterine stimulation if high-dose in pregnancy
- WHAT HARMS FIRST → Bleeding event pre-op or on warfarin
- FIRST NURSING ACTION → ASSESS anticoagulant use, dose of ginger, and surgical plan; HOLD pre-op

BLACK COHOSH

Class: Herbal Menopause Symptom Reliever (*Actaea racemosa*)

System: Reproductive / Endocrine

1. DRUG OVERVIEW — WHY WE GIVE IT

Key Indications & Clinical Use

- Self-use: menopausal hot flashes, night sweats, mood changes
- PMS, dysmenorrhea
- Labor induction (folk use — not recommended)
- Evidence: modest benefit for vasomotor symptoms

2. MECHANISM OF ACTION

How It Changes Physiology

- NOT estrogenic (older belief was wrong)
- Serotonergic activity → central thermoregulation
- Dopaminergic activity
- May ↓ LH release
- Net effect: ↓ hot flashes via CNS mechanism

3. THERAPEUTIC EFFECTS — Is It Working?

Expected Improvements

- ↓ Frequency/severity of hot flashes (4-8 wk onset)
- ↓ Night sweats
- Improved mood & sleep

4. SIDE EFFECTS & ADVERSE REACTIONS

COMMON

- GI upset, nausea
- Headache, dizziness
- Weight gain
- Vaginal spotting
- Rash

SERIOUS / LIFE-THREATENING

-  HEPATOTOXICITY — liver failure reported, transplant required in some cases
- Possible ↑ risk of breast cancer recurrence (debated)
- Bradycardia, hypotension (high doses)
- Miscarriage / preterm labor (pregnancy)

5. PRIORITY NURSING CONSIDERATIONS

ASSESS • MONITOR • HOLD • NOTIFY

- **ASSESS:** liver function, jaundice, dark urine, RUQ pain, pruritus
- **HOLD:** with hepatotoxic drugs (acetaminophen, statins, isoniazid, methotrexate)
- **CONTRAINDICATIONS:** liver disease, pregnancy, breastfeeding, hormone-sensitive cancers, anticoagulants
- **LIMIT duration:** do NOT use >6 months continuously
- **MONITOR:** LFTs baseline & q2-3 months, BP, HR
- **NOTIFY** provider immediately for jaundice, dark urine, abdominal pain, fatigue

6. LABS & DIAGNOSTICS

Monitor & Interpret

- 🚨 LFTs (AST, ALT, bilirubin, ALP) — PRIORITY
- Albumin, PT/INR (liver synthetic function)
- No specific drug level

7. ADMINISTRATION & SAFETY

Route • Timing • High-Alert Precautions

- Oral: standardized extract (Remifemin® most studied)
- Typical dose: 20-40 mg PO BID
- Timing: with food
- Full effect: 4-8 weeks
- Duration: ≤6 months

8. PATIENT EDUCATION

What the Patient MUST Know

- 🚨 STOP & call provider IMMEDIATELY: yellow skin/eyes, dark tea-colored urine, severe fatigue, abdominal pain
- Do NOT take if liver disease, pregnant, or breast/uterine cancer history
- Avoid alcohol
- Avoid acetaminophen or combine carefully
- Baseline & periodic liver labs required
- Not a replacement for HRT — discuss options with provider

9. NCLEX TEST TRAPS

Common Confusions & Priority Pitfalls

- #1 NCLEX trap: BLACK COHOSH = LIVER TOXICITY (not bleeding!)
- Menopausal pt on black cohosh + Tylenol → ↑↑ hepatotoxicity risk
- Pt says 'I'm nauseous and my eyes look yellow' → HOLD + notify provider → liver failure
- Students confuse black cohosh (liver) with blue cohosh (uterotonic, cardiotoxic)
- Do NOT confuse with Dong Quai or soy — these ARE phytoestrogens

10. MEMORY BOOSTERS

Mnemonics & Quick Recall

- BLACK COHOSH = 'Black as a BAD liver' → hepatotoxicity
- Cohosh = Cools Off Hot-flashes, Offers Serious Hepatic Scare
- Think: 'Black → Liver failure → Yellow skin (jaundice)'

CLINICAL JUDGMENT SNAPSHOT

Think Like the NCLEX

- #1 PRIORITY RISK → Hepatotoxicity / liver failure
- WHAT HARMS FIRST → Fulminant hepatic failure — jaundice, coagulopathy, encephalopathy
- FIRST NURSING ACTION → ASSESS for jaundice, RUQ pain, dark urine, fatigue; HOLD drug & draw LFTs; notify provider

TURMERIC (CURCUMIN)

Class: Herbal Anti-Inflammatory (Curcuma longa)

System: Musculoskeletal / GI / Hematologic

1. DRUG OVERVIEW — WHY WE GIVE IT

Key Indications & Clinical Use

- Self-use: osteoarthritis, rheumatoid arthritis, chronic inflammation
- Dyspepsia, IBS, ulcerative colitis
- Antioxidant, cancer chemoprevention (investigational)
- Active compound: curcumin (low bioavailability alone — often combined with piperine)

2. MECHANISM OF ACTION

How It Changes Physiology

- Inhibits NF- κ B $\rightarrow$ $\downarrow$ inflammatory cytokines (TNF- α , IL-6)
- Inhibits COX-2 & LOX $\rightarrow$ $\downarrow$ prostaglandins & leukotrienes
- Inhibits platelet aggregation $\rightarrow$ antiplatelet
- $\uparrow$ Bile secretion $\rightarrow$ choleric
- Antioxidant: scavenges free radicals

3. THERAPEUTIC EFFECTS — Is It Working?

Expected Improvements

- $\downarrow$ Joint pain & stiffness (OA/RA) — 4-8 wk onset
- $\downarrow$ Inflammatory markers (CRP, ESR)
- Improved GI symptoms

4. SIDE EFFECTS & ADVERSE REACTIONS

COMMON

- GI upset, nausea, diarrhea
- Headache
- Yellow staining of skin/stool (harmless)
- Allergic dermatitis

SERIOUS / LIFE-THREATENING

-  BLEEDING with anticoagulants/antiplatelets
-  HEPATOTOXICITY — recent case reports of liver injury, esp. with piperine formulations
- Gallbladder contraction $\rightarrow$ contraindicated in biliary obstruction/stones
- Iron chelation $\rightarrow$ iron deficiency anemia with chronic high dose
- Hypoglycemia with diabetic meds

5. PRIORITY NURSING CONSIDERATIONS

ASSESS • MONITOR • HOLD • NOTIFY

- ASSESS: bleeding, bruising, LFTs, biliary disease history
- HOLD: with warfarin, heparin, DOACs, aspirin, NSAIDs, clopidogrel
- HOLD: 2 weeks before surgery
- CONTRAINDICATIONS: gallstones/biliary obstruction, active bleeding, pre-op, pregnancy (high doses), liver disease
- MONITOR: LFTs, INR, CBC (iron studies if chronic use), BG
- NOTIFY provider for RUQ pain, jaundice, bleeding, bruising

6. LABS & DIAGNOSTICS

Monitor & Interpret

- LFTs (AST, ALT, bilirubin) — especially with piperine-enhanced products
- PT/INR
- Iron studies / ferritin with chronic use
- BG if diabetic
- CRP, ESR (to show therapeutic effect)

7. ADMINISTRATION & SAFETY

Route • Timing • High-Alert Precautions

- Oral: capsules, powder, turmeric + piperine (black pepper) for ↑ absorption
- Typical dose: 500-1000 mg curcumin BID
- Timing: with meals containing fat + black pepper
- Topical: used for skin conditions (stains!)

8. PATIENT EDUCATION

What the Patient MUST Know

- STOP 2 weeks before surgery or procedures
- Report: unusual bleeding, jaundice, dark urine, RUQ pain
- Do NOT take with gallstones
- Turmeric stains clothing, teeth, countertops
- Food amounts in cooking = safe; supplement doses = therapeutic risk
- Tell provider & pharmacist before starting

9. NCLEX TEST TRAPS

Common Confusions & Priority Pitfalls

- Turmeric + warfarin = bleeding risk (same as the G-herbs)
- Pt with gallstones + turmeric → biliary colic / cholecystitis
- Recent hepatotoxicity alerts — students miss this because 'turmeric is food'
- Piperine-enhanced curcumin → ↑↑ absorption AND ↑ hepatotoxicity risk
- Therapeutic doses ≠ curry in food

10. MEMORY BOOSTERS

Mnemonics & Quick Recall

- TURMERIC = 'Thins blood, Triggers gallbladder, Taxes liver'
- Think: 'Yellow spice → Yellow skin (jaundice watch)'
- Bleeding herb (like the G's) + liver risk (like Black Cohosh) + gallbladder trap

CLINICAL JUDGMENT SNAPSHOT

Think Like the NCLEX

- #1 PRIORITY RISK → Bleeding + hepatotoxicity + biliary obstruction in gallstone pts
- WHAT HARMS FIRST → Hemorrhage in anticoagulated pts OR biliary colic / hepatic injury
- FIRST NURSING ACTION → ASSESS anticoagulant use, gallbladder history, and LFTs; HOLD pre-op and if RUQ symptoms develop



FINAL NCLEX-READY SYNTHESIS

🔥 TOP 5 PRIORITY-ACTION PATTERNS (MEMORIZE)

If You See This → Do This

- Pt on WARFARIN starts any G-herb or turmeric → HOLD + check INR + notify provider
- Pt on SSRI + St. John's Wort + hyperthermia/clonus → STOP both + call provider (serotonin syndrome)
- Transplant / HIV / autoimmune pt asking about Echinacea or SJW → DO NOT recommend + educate
- Menopausal pt on Black Cohosh c/o jaundice/dark urine → HOLD + LFTs + notify provider
- Diabetic on ginseng c/o shakiness/sweating → CHECK BLOOD GLUCOSE first

🎯 PRE-OP HERB HOLD RULES (TESTED HEAVILY)

Surgical Nursing Priority

- GINKGO: hold 2 weeks preop
- GARLIC: hold 7-10 days preop
- GINSENG: hold 7 days preop
- GINGER: hold 1-2 weeks preop
- ST. JOHN'S WORT: hold 5 days preop (anesthesia + bleeding interactions)
- TURMERIC: hold 2 weeks preop
- BLACK COHOSH / ECHINACEA: not routinely required, but disclose to surgeon

🔄 UNIVERSAL HERBAL TEACHING POINTS

Every Pt on ANY Herb Must Be Taught:

- Tell EVERY provider, pharmacist, dentist, and anesthesiologist about herbal use
- 'Natural' ≠ 'safe' — herbs can cause organ failure & drug interactions
- Stop herbs before surgery per drug-specific window
- Use only standardized products from reputable sources (no FDA quality control)
- Do NOT substitute herbs for prescribed medications without provider approval
- Pregnant / breastfeeding / pediatric pts: consult provider before any herb
- Report any new symptom: bleeding, jaundice, hypoglycemia, rash, mood change

🏆 MOST TESTED CONCEPTS ON NGN

If you learn only these, you'll catch 90% of NCLEX herb questions:

- The 5 BLEEDING G's (+ turmeric) — HOLD with anticoagulants & preop
- St. John's Wort = CYP450 inducer → LOWERS drug levels (warfarin, OCPs, digoxin, HIV, transplant)



- St. John's Wort + SSRI = serotonin syndrome
- Black Cohosh = hepatotoxicity
- Echinacea contraindicated in HIV/autoimmune/transplant
- Ginseng + insulin/sulfonylurea = hypoglycemia
- Garlic + antihypertensive = hypotension (fall risk)
- Ginger = safest antiemetic in pregnancy at ≤ 1 g/day