

## 4.3. Stanya Abhava and Complementary feeding 4.4. Stanyapanayana

### Unit 4 · Topic 3 Stanya Abhava (insufficient breast-milk) & Complementary Feeding (6-23 months)

#### Learning goals

By the end of this topic you will be able to: (i) define **Stanya Abhava** and distinguish primary vs. secondary lactation insufficiency; (ii) assess causes on the **mother-infant dyad**; (iii) list step-wise management including **non-pharmacological** measures and the **evidence position on galactagogues**; (iv) write an **exam-ready plan** for complementary feeding—**when to start, what, how much, how often**, with Indian examples; (v) counsel families and document follow-up.

## 1) Stanya Abhava — definitions & clinical framing

**Definition (clinical):** Insufficient milk **transfer** to the infant, reflected by poor weight trajectory, low output, or signs of dehydration—**irrespective of maternal volume perception**. Classify:

- **Primary (true) low supply:** breast hypoplasia/insufficient glandular tissue, retained placental fragments, untreated hypothyroidism, Sheehan syndrome, certain medications (e.g., ergot derivatives), prior breast surgery damaging ducts.
- **Secondary (functional) low supply:** suboptimal **latch/positioning**, infrequent or timed feeds, separation, supplement-before-breast patterns, unresolved engorgement/blocked ducts, maternal stress/illness, infant factors (late-preterm, SGA, ankyloglossia, neuromuscular issues).

**Gold rule:** Milk production obeys **supply-demand**: effective, frequent **drainage** drives synthesis.

## 2) Assessment (dyad-centred, OSCE list)

- **History (mother):** onset of “low milk,” frequency/length of feeds, night feeds, breast fullness/softening, pain/trauma, medications, thyroid symptoms, postpartum haemorrhage, prior surgery.
- **History (infant):** GA/birthweight, jaundice, output (day-wise), lethargy, illnesses; bottle/teat use.
- **Observation:** a **complete feed** (positioning, latch, suck-swallow-breath, audible swallows, milk transfer), maternal comfort.
- **Growth/output:** Day-wise diaper counts ( $\geq 6$  wets by day 5), weight loss/gain (regain birthweight by 10-14 d; then ~20-30 g/day early months).
- **Breast exam:** symmetry, nipple shape/trauma, signs of mastitis/duct block.
- **Infant oral exam:** palate, tongue mobility, tone.

## 3) Management

### 3.1 Immediate non-pharmacological measures (first line)

1. **Skin-to-skin** and **on-demand** feeds (8-12/24 h), including **night**; avoid clocks.
2. **Optimize attachment** (deep latch; chin in; more areola below) and **positioning**; treat pain/trauma causes.
3. **Drain to make:** begin on the fuller breast; let infant finish (hind-milk access), then offer the second; **hand-express/pump** after feeds if transfer is poor to stimulate supply.
4. **Avoid or minimise bottles/teats;** if medically needed, use **cup/spoon** with **expressed breast milk (EBM)** while prioritising direct breastfeeding.

5. **Manage engorgement/duct block** promptly (warmth before, cold after; frequent emptying).
6. Address **maternal factors** (hydration, caloric/protein adequacy, sleep segments, thyroid screening when indicated).

### **3.2 Galactagogues — evidence position (use only after 3.1 is optimized)**

- **Academy of Breastfeeding Medicine Protocol #9 (2018):** pharmacologic galactagogues (e.g., **domperidone**, **metoclopramide**) **may** increase volumes in select dyads **after** non-pharmacologic optimization, but require **risk-benefit** review and monitoring (domperidone: **QT** concerns; metoclopramide: CNS effects). Herbal agents (e.g., **Shatavari**, fenugreek) show **variable, low-certainty** evidence; use only with informed consent and monitoring.

### **3.3 When own mother's milk is unavailable/insufficient**

- **First alternative: Donor human milk** from a regulated **human milk bank**, especially for preterm/LBW.
- **Formula** only when medically indicated or donor milk unavailable; ensure **safe preparation** and counselling to avoid displacing breastfeeding.

**Documentation tip:** Record latch coaching provided, frequency plan, any galactagogue decision (indication, dose, monitoring), and **follow-up weight checks**.

## **4) Complementary feeding (6-23 months) — what, when, how**

**Definition:** Introduction of **solid/ semi-solid/ soft** foods from **completed 6 months (180 days)** while **continuing breastfeeding** to 2 years and beyond.

### **4.1 Core principles (WHO 2023 update)**

- **Timely:** start **at 6 months**.
- **Adequate:** meet energy & **iron/zinc** needs; use **fortified foods** or supplements where needed.
- **Safe:** hygiene, safe water, separate utensils; avoid honey <12 months.
- **Responsive:** patient, cue-based, **active feeding**, no force.

### **4.2 Frequency & texture**

Age	Meals/day (breastfed)	Snacks	Texture
6-8 mo	2-3	1-2 as needed	Thick purées/mashed; soft finger foods
9-23 mo	3-4	1-2 as needed	Mashed → minced → family foods (soft)
Non-breastfed 6-23 mo	4 meals	1-2 snacks	Include milk feeds or alternatives

**Consistency rule:** **"Thick enough to stay on the spoon."** Thin gruels lower energy density.

### **4.3 Portion guidance**

- **6-8 mo:** ~½ katori / bowl (~90-120 ml) per feed.
- **9-11 mo:** ~¾ katori (~120-150 ml).
- **12-23 mo:** ~1 katori (~180-200 ml).

Increase as appetite signals; offer **variety**.

### **4.4 What to feed (dietary diversity)**

Aim for **≥5 of 8** food groups daily (grains/ tubers; legumes/ nuts; dairy; flesh foods; eggs; vitamin-A rich fruit/ veg; other

fruit/ veg; breastmilk/not counted for MDD). Use **iron-rich** foods from the start (meats/ eggs/ legumes/ fortified cereals).

#### **Vegetarian options (examples):**

- **Iron/Zinc:** sprouted moong chilla with ghee; rajma/dal + poha upma; roasted chana powder in khichri; fortified infant cereal.
- **Protein/energy:** mashed dal-khichri with ground peanuts/til; paneer bhurji; curd + banana.
- **Fats:** add **ghee/oil** to raise density ( $\frac{1}{2}$ -1 tsp per katori).
- **HMOs & immunity** continue via breastfeeding.

### **4.5 Sample feeder plans**

#### **6-8 months (breastfed)**

- Morning: mashed banana + curd.
- Midday: thick dal-khichri with ghee ( $\frac{1}{2}$  katori).
- Evening: suji halwa with ground nuts (as paste) or fortified cereal.  
(Breastfeeds on demand between meals.)

#### **9-11 months**

- Idli pieces with sambar (mashed veg), curd.
- Rice-dal-veg khichri ( $\frac{3}{4}$  katori) +  $\frac{1}{2}$  tsp ghee.
- Seasonal fruit (ripe papaya/mango).

#### **12-23 months**

- Family foods (soft): chapati soaked in dal + sabji; egg/veg omelette strips or paneer cubes; fruit; milk/curd.

**Allergens:** Early introduction of **well-cooked egg/peanut** (as thin paste/powder mixed in foods) can be safe after 6 months where culturally acceptable; watch for reactions and discuss local guidance.

### **4.6 Micronutrient support**

- **Iron:** emphasize iron-rich foods/fortified cereals from day one of CF; where diets are low in bioavailable iron, **supplementation** may be needed per national policy.
- **Vitamin D:** supplement as per local recommendations; ensure sunlight exposure prudently.
- **During illness:** continue breastfeeding; give **extra fluids** and **one additional meal** during recovery.

### **4.7 Hygiene (“Five cleans”)**

Clean hands, utensils, surfaces, safe water, and safe storage/reheat. Discard leftovers kept at room temperature  $>2$  hours.

## **5) Documentation & counselling**

- **Plan noted:** start CF at **completed 6 months**; stated **meal frequency** and **portion sizes**; iron-rich options listed.
- **Breastfeeding support:** latch corrected; target **8-12 feeds**; post-feed hand expression schedule; review in **48-72 h** with weight.
- **Red flags:**  $<6$  wets/day after day 5, weight loss  $>10\%$ , lethargy, fever, refusal to feed, persistent vomiting/diarrhoea.

## Self-assessment

### MCQs

1. The **first-line** correction in Stanya Abhāva is:
  - A. Start domperidone immediately
  - B. Increase effective milk removal (latch, frequency, drain) and skin-to-skin**
  - C. Give top-up formula after every feed
  - D. Delay night feeds

**Answer: B.**
2. According to WHO, a breastfed infant **9-23 months** should receive:
  - A. 1 meal/day only
  - B. 2 meals + 3 snacks
  - C. 3-4 meals/day with 1-2 snacks**
  - D. Only family foods without breastfeeding

**Answer: C.**
3. Which statement about galactagogues is **true**?
  - A. They replace the need to optimize latch
  - B. They may help selected dyads after non-pharmacologic steps; monitor risks (e.g., QT with domperidone)**
  - C. All herbal agents are proven effective
  - D. Metoclopramide has no adverse effects

**Answer: B.**
4. Minimum meal frequency for a **non-breastfed** 10-month-old is:
  - A. 2 times/day
  - B. 4 times/day (plus 1-2 snacks)**
  - C. 3 times/day only
  - D. 1 time/day

**Answer: B.**
5. The **consistency** of complementary foods at 6-8 months should be:
  - A. Very thin liquid
  - B. Thick purée/mashed that stays on the spoon**
  - C. Large chunks
  - D. Dry finger foods only

**Answer: B.**

### Short answers (3-5 lines)

- List **six** reversible causes of secondary low supply and your immediate corrections.
- Write a **one-day CF menu** for a 7-month-old vegetarian infant that meets iron and energy needs.
- Explain the **responsive feeding** approach and two benefits.
- State three situations where **donor human milk** is preferred to formula.

## References

### Classical (orientation; no verse quoted here)

- **Kāśyapa Saṃhitā (Vṛddhajīvakīya Tantra)** — sections on *Stanya*, *Dhatri-lakṣaṇa*, *Bālopacāra*, and *Lehyas* for infant nourishment.
- **Caraka Saṃhitā** — *Cikitsāsthāna* 15 (Upadhātu—*stanya* from *rasa*), *Sūtrasthāna* 27 (*Annapanavidhi*).
- **Aṣṭāṅga Hṛdayam** — *Sūtrasthāna* (*Kṣīra-varga*) and *Uttaratantra*—*Bālopacaraṇīya*.
- **Suśruta Saṃhitā** — *Śārīrasthāna* (post-natal care; wet nurse context).

## Modern & guideline sources

- **WHO.** *Guideline for complementary feeding of infants and young children 6-23 months* (2023); **summary & recommendations.**
- **WHO.** *Infant and young child feeding* (Fact sheet, 2023) — meal frequency, fortified foods, feeding during/after illness.
- **UNICEF.** *Complementary Feeding Guidance* (2020) — indicators (MDD/MMF/MAD).
- **IAP** (2016). *Infant and Young Child Feeding Guidelines* — India-adapted CF details.
- **ABM Protocol #9** (2018). *Use of Galactagogues in Initiating or Augmenting Maternal Milk Production.*

## Unit 4 · Topic 4. **Stanyapānayāna** (Weaning / Planned cessation & transition)

### Learning goals

You will be able to: (i) define **Stanyapānayāna** and distinguish **partial** vs **complete** weaning; (ii) decide **when** and **how** to wean; (iii) plan **gentle, graded** weaning with nutrition, sleep, and psychosocial safeguards; (iv) counsel in **special situations** (maternal illness, new pregnancy, toddler behaviours).

**Classical note:** While the term “Stanyapānayāna” (withdrawal from the breast) is used in paediatric Ayurveda texts in context of *bāla-poshana*, the procedural details mirror today’s *gradual weaning* principles: maintain *bala* and *ojas* by **not** withdrawing milk abruptly; ensure digestible, wholesome substitutes (*annapāna*) and emotional reassurance. (Classical sources listed below.)

### 1) Definitions & timing

- **Partial weaning:** reducing the number of breastfeeds while continuing some (e.g., night/ morning).
- **Complete weaning:** stopping all breastfeeds when the child is developmentally ready **and** a nutritionally adequate diet is ensured.

**When:** Continue breastfeeding **to 2 years and beyond** while providing age-appropriate complementary foods; wean when **dyad-ready**, or earlier only for **medical** reasons with safety nets.

### 2) Readiness cues (child-centred)

- Accepts family foods (soft → chopped), drinks from a **cup**, can be settled without every feed, shows curiosity/independence, stable growth. Avoid during **major transitions** (illness, moving home).

### 3) Gentle weaning algorithm

1. **Decide the order:** drop **one feed at a time** every **3-7 days** (start with the least-preferred feed; **keep bedtime feed** for last if needed).
2. **Offer-shift-replace:** at the usual time, **offer connection first** (play, cuddle, book), then **shift** with water/cup milk (as per age) and **replace** with a **nutritious snack/meal**.
3. **Routines:** strengthen **sleep cues** that are **not milk-dependent** (song, dim light, back rub).
4. **Manage breasts:** expect **fullness** initially; use **hand expression** just to comfort (avoid full drainage); cold packs/NSAIDs for discomfort.
5. **Emotions:** acknowledge toddler protest without force; keep **responsive feeding** with foods.

6. **If relapse/illness: pause** the wean; resume when well (illness needs more fluids & comfort).

#### **Night-weaning (12+ months, if chosen):**

- Increase daytime calories; cluster evening feeds with solids; use partner support at night; lengthen intervals gradually; offer sips of water, cuddle back to sleep.

## **4) Special situations**

- **Maternal pregnancy:** breastfeeding is usually **safe** in an uncomplicated pregnancy; many choose **partial wean** due to nipple tenderness/fatigue. If **preterm-labour risk** or **placenta previa**, seek obstetric advice.
- **Maternal medications/illness:** see **contraindications** from Topic 4.2; temporary **pump-and-discard** may be needed (e.g., radioisotopes).
- **Return to work/study:** shift to **mixed feeding** with expressed milk; maintain supply by **pumping at work**, morning/evening breastfeeds, and weekend on-demand feeds; consider **gradual wean** when desired.
- **Toddler biting/aversion:** troubleshoot latch/position, teething comfort measures; set calm, consistent limits.

## **5) Nutrition & sleep guardrails during weaning**

- Maintain **CF frequency** (Section 4.2 table) and **dietary diversity**; include **iron-rich** foods at least **once daily** and **fat** in each meal for energy density.
- Ensure **1-2 healthy snacks**, offer water in an open cup; avoid juice/sugar drinks.
- **Sleep:** preserve naps/bedtime routine; milk is **not** the only sleep cue.
- **Micronutrients:** adhere to national guidance for **iron/vitamin D** where diets are limited.

## **6) What not to do**

- Abrupt cessation without substitutes (risk: **engorgement**, mastitis, child distress, caloric deficit).
- Bitter pastes/irritants on nipples ("aversion methods")—**unsafe** and undermines trust.
- Withholding fluids during illness.
- Replacing breastfeeds with **thin gruels** of low energy density.

## **7) Counselling script (OSCE-ready)**

"Let's drop **one feed this week**, the mid-afternoon one. At that time, offer a **snack** (khichri/paneer/banana) and **water in a cup**. If breasts feel full, express **just enough** for comfort and use a **cold compress**. Keep bedtime feed for now; we'll reassess in a week. If your child falls ill, we'll **pause** weaning till recovery."

## **Self-assessment**

### **MCQs**

1. The **safest first step** in planned weaning is to:
  - Stop all feeds on one day
  - Drop one feed every few days and replace with routine + snack**
  - Apply bitter agents on nipples

D. Offer only water at feed times

**Answer: B.**

2. During weaning, minimum meal frequency for a **breastfed 12-23 mo** child is:

- A. 1 meal/day
- B. 3-4 meals/day + 1-2 snacks**

C. 2 meals/day only

D. 5 meals without snacks

**Answer: B.**

3. Which is **true** about pregnancy and breastfeeding?

- A. Always contraindicated
- B. Usually safe in uncomplicated pregnancy; individualize**
- C. Requires abrupt weaning in first trimester
- D. Only allowed if child is <6 months

**Answer: B.**

## Short answers

- Outline a **7-day plan** to wean a healthy 20-month-old from 3 day feeds to 1 bedtime feed.
- List four **comfort measures** for the mother's breasts during weaning.
- Write three **red flags** during weaning that require clinical review.

## References

### Classical (orientation)

- **Kāśyapa Saṃhitā** — guidance on *bāla-poshana*, *annapāna*, and suitability of **dhatri** when maternal milk is inadequate.
- **Caraka Saṃhitā** — *Cikitsāsthāna* 15 (upadhātu—stanya), *Sūstrasthāna* 27 (*Annapanavidhi*).
- **Aṣṭāṅga Hṛdayam** — *Uttaratantra*—*Bālopacaraniya* (infant nourishment and transitions).

### Modern & guideline sources

- **WHO/UNICEF** breastfeeding policy (initiation within 1 h; EBF 6 mo; continued BF to 2 y+).
- **WHO** (2023). *Guideline for Complementary Feeding (6-23 mo)* — frequency, diversity, iron/fortified foods, feeding during illness.
- **WHO Fact Sheet (2023)** — meal frequency & snacks.
- **UNICEF** (2020). *Complementary Feeding Guidance* — **MDD/MMF/MAD** indicators.
- **IAP** (2016). *IYCF Guidelines* — India-adapted practice.
- **ABM Protocol #9** (2018). *Galactagogues*: indications, cautions.

## 60-second recap

- **Stanya Abhāva** = insufficient **transfer**, most often from **fixable technique/frequency** issues. Start with **skin-to-skin, deep latch, 8-12 feeds/day, drain-to-make**; consider **galactagogues** only **after** optimization.
- **Complementary feeding: start at 6 months**; 2-3 meals (6-8 mo) → **3-4 meals (9-23 mo) + 1-2 snacks**; focus on **iron-rich** foods and **thick** consistency; keep breastfeeding to **2 years+**.
- **Stanyapānayāna (weaning)**: **gradual**, child-centred, with nutrition/sleep guardrails and emotional reassurance—**never abrupt** unless medically necessary.