

Continue Learning with FirstHope

Complete Notes on the FirstHope App

Complete subject and semesters are available on FirstHope app only.

- Get complete subject and semester notes in the FirstHope app.
- Available for B.Pharm, D.Pharm, M.Pharm and Pharm.D students.

[Click here to get the FirstHope app](#)

Join the FirstHope Telegram Channel

Join FirstHope Notes and keep up with channel updates.

[Click here to join Telegram](#)

Instagram

@firsthope.official

[Click here to follow Instagram](#)

YouTube Channel

FirstHope-Pharmacy / Live streams

[Click here to watch the YouTube channel](#)

WhatsApp Channel

Follow FirstHope on WhatsApp.

[Click here to join the WhatsApp channel](#)

FirstHope Website

firsthopenotes.com

[Click here to visit the website](#)

Examination of Different Taste Modalities

Experiment 7 - Practical Notes

Name: _____ Roll no.: _____ Date: _____

Aim

To compare recognition of sweet, salty, sour, bitter and umami using teacher-approved food-grade solutions.

Principle

Taste receptor cells respond to several chemical modalities. Receptors are distributed across taste-bearing regions; there is no strict map in which each taste is confined to a single exclusive tongue zone. Smell, temperature and texture also influence flavour.

Requirements

- Instructor-prepared food-grade taste solutions and water; allergy information and voluntary participation.
- Individual disposable applicators/cups, coded containers and record sheet.

Procedure

1. Prepare

Explain the activity and screen for food allergies, oral lesions and unwillingness to taste. Offer a recorded-data alternative.

2. Code the solutions

The instructor codes low-intensity sweet, salty, sour, bitter and umami solutions. Laboratory chemicals are never tasted.

3. Present individually

Apply a teacher-approved small quantity using a clean individual applicator or cup. Ask the participant to identify the modality without showing the code.

4. Rinse and repeat

Rinse with water and allow a rest interval before the next solution. Use a fresh applicator and randomise presentation order.

5. Record

Record the perceived modality, confidence and any limitation; reveal the code after the observations are complete.

6. Discuss

Distinguish taste from flavour and avoid concluding a cranial-nerve lesion from a classroom recognition error.

Human Anatomy, Physiology and Pathophysiology II

Observations and Record

Coded solution	Reported modality	Assigned modality / notes
A	_____	_____
B	_____	_____
C	_____	_____
D	_____	_____
E	_____	_____

Worked Example

The numbers below are illustrative; enter your own observations in the record.

- If four of five coded modalities are identified, recognition accuracy in this activity is $4/5 \times 100 = 80\%$. It is not a validated clinical taste score.

Result

Record the observed outcome and calculated value, with units. State whether the stated laboratory specification was met; do not copy the worked example as your result.

Precautions

- Use only instructor-approved food-grade materials with individual utensils; participants may decline.
- Do not use concentrated quinine, corrosive solutions or unknown chemicals for tasting.

Viva Questions and Answers

1. Why is a strict tongue map misleading?

Several taste modalities can be detected across multiple taste-bearing regions.

2. How is flavour broader than taste?

It includes smell, texture, temperature and other sensory input.

3. Why rinse between solutions?

It reduces carryover and adaptation.

Continue Learning with FirstHope

Complete Notes on the FirstHope App

Complete subject and semesters are available on FirstHope app only.

- Get complete subject and semester notes in the FirstHope app.
- Available for B.Pharm, D.Pharm, M.Pharm and Pharm.D students.

[Click here to get the FirstHope app](#)

Join the FirstHope Telegram Channel

Join FirstHope Notes and keep up with channel updates.

[Click here to join Telegram](#)

Instagram

@firsthope.official

[Click here to follow Instagram](#)

YouTube Channel

FirstHope-Pharmacy / Live streams

[Click here to watch the YouTube channel](#)

WhatsApp Channel

Follow FirstHope on WhatsApp.

[Click here to join the WhatsApp channel](#)

FirstHope Website

firsthopenotes.com

[Click here to visit the website](#)