

Class 6 Science / Chapter 3: Mindful Eating: A Path to a Healthy Body

Curiosity Grade 6 / Notes + Activities ke Jawab / Notes by Abhishek Sir

1. Hum kya khate hain?

Sanskrit saying: "Annena jaatani jeevanti" = khana jeevon ko jeevan deta hai. Alag-alag states me alag khana khaya jaata hai kyunki wahan jo fasal ugti hai usi se khana banta hai. Fasal mitti aur mausam par depend karti hai. Khane ki pasand taste, culture aur parampara par bhi depend karti hai.

State	Fasal	Traditional khana
Punjab	Makka, gehu, chana	Makki di roti, sarson da saag, lassi
Karnataka	Chawal, ragi, nariyal	Idli, dosa, ragi mudde, rasam
Manipur	Chawal, bamboo, soya	Eromba, singju, black tea

Khana banane ke tareeke badle hain

- Pehle chulha, ab gas stove.
- Pehle sil-batta, ab electric grinder.
- Karan: technology, achchi transport, behtar communication.

2. Food ke Components (Poshak tatva)

Nutrient	Kaam	Sources
Carbohydrate	Energy (turant energy: glucose)	Gehu, chawal, makka, aloo, shakarkandi, kela, aam
Fat	Stored energy, sardi me garmi	Ghee, tel, nuts, til, soyabean, butter
Protein	Sharir banana aur marammat (growth and repair)	Dal, rajma, matar, doodh, paneer, ande, machhli
Vitamins	Bimaariyon se bachaav	Phal, sabzi
Minerals	Bimaariyon se bachaav	Doodh, namak, hari sabzi

Carbohydrate + Fat = Energy dene wale khane. Protein = Body-building khana. Vitamin + Mineral = Protective (suraksha dene wale) nutrients. Ye thodi matra me chahiye par

bahut zaroori hain.

Trick / Yaad rakhne ka tareeka

- Energy: Carbs + Fats. Banana: Protein. Bachaana: Vitamins + Minerals.
- Polar bear apni fat se mahino bina khaye sota hai.

3. Deficiency Diseases (kami se hone wale rog)

Nutrient	Kaam	Sources	Rog	Lakshan
Vitamin A	Aankhein aur twacha	Papita, gajar, aam, doodh	Night blindness	Kam dikhna, andhere me nahi dikhna
Vitamin B1	Dil aur sharir ke kaam	Dal, nuts, sabut anaaj	Beriberi	Haath-pair me sujan/jalan, saans me takleef
Vitamin C	Rog se ladna	Amla, amrood, santra, nimbu	Scurvy	Masoode se khoon, ghaav der se bharna
Vitamin D	Calcium absorb karna	Dhoop, doodh, ande, machhli	Rickets	Naram aur tedhi haddiyan
Calcium	Haddi aur daant	Doodh, dahi, paneer	Weak bones, tooth decay	Kamzor haddi, daant kharaab
Iodine	Sharir aur dimaag	Iodised namak, seaweed	Goitre	Gale me sujan
Iron	Khoon banana	Hari sabzi, chukandar, anaar	Anaemia	Kamzori, saans phoolna

Do kahaniyan (cases)

- Case 1: James Lind (1746) ne dekha ki nimbu-santra khane se sailors ka scurvy theek hua, kyunki unme Vitamin C hai.
- Case 2: Himalaya aur uttari maidan me mitti me iodine kam tha, goitre hota tha. Iodised namak se rog kam hua.

Roughage (dietary fibre): koi nutrient nahi dete par kabz (constipation) se bachate hain aur bina padhe hue khane ko bahar nikalne me madad karte hain. Sources: hari sabzi, phal, sabut anaaj, dal. **Paani:** nutrients absorb karne me madad aur pasine-peshaab se kachra nikalta hai.

Cooking me nutrients: tez aanch se **Vitamin C** jaise nutrients nasht ho jaate hain, isliye kuch kaccha phal-sabzi bhi khaana chahiye (par achchi tarah dhokar). **Vitamin D** sharir dhoop se khud bana leta hai. **Namak** samundar ke paani ya chattan se milta hai (Agariya tribe, Gujarat).

Coluthur Gopalan: India me nutrition research ke pioneer. 500+ khano ka nutritional analysis kiya. Unki khoj se **Mid Day Meal** (ab **PM POSHAN**) chalu hua.

4. Food ke Tests

Test	Kya karein	Result (positive)
Starch	Khane par iodine ke 2-3 boond	Neela-kaala (blue-black) rang
Fat	Khane ko kaagaz me dabao	Kaagaz par tel ka daag, roshni me chamakta hai
Protein	Paste + paani + copper sulfate (2 boond) + caustic soda (10 boond)	Baingani (violet) rang

Precautions (Protein test)

- Teacher ki dekh-rekh me karein.
- Chemicals ko chhoo-na, sunghna, muh me daalna mana.
- Gir jaaye to turant paani se dho lo.

Ek khane me kayi nutrients ho sakte hain. Jaise peanut me protein aur fat dono.

5. Balanced Diet aur Junk Food

Balanced diet = jisme saare nutrients, roughage aur paani sahi matra me ho. Matra umar, ling, activity aur sehat par depend karti hai. **Junk food** (wafers, candy, cold drink) me sugar/fat zyada, protein-vitamin-fibre kam; isse **motapa (obesity)** hota hai. "Health is the Ultimate Wealth".

	Potato wafers	Roasted chana
Energy	536 kcal	355 kcal
Fat	35 g	6.26 g
Protein	7 g	18.64 g
Fibre	4.8 g	16.8 g

Fortification: processing me extra nutrients milana (iodised namak, baby food). **FSSAI** khane ki quality dekhta hai.

6. Millets aur Food Miles

Millets (jowar, bajra, ragi, sanwa) chhote anaaj hain, vitamins, iron, calcium aur fibre se bharpoor; isliye nutri-cereals. Kisi bhi mausam me ugte hain.

Food miles = khana khet se hamari plate tak jitni doori tay karta hai. Kam food miles = kam kharcha, kam pollution, local kisan ko support, khana taaza. Khana waste mat karo, utna hi lo jitna kha sako.

7. Activities ke Jawab

Q. Activity 3.1 - Hafte ka khana (Table 3.1)

Ans. Apne hafte ka khana likho (jaise roti-sabzi, dal-chawal, paratha, idli...). **Observation:** hum har baar ek jaisa khana nahi khate; dost ke khane se kuch cheezein same aur kuch alag hoti hain.

Q. Activity 3.2 - States ka khana

Ans. Kuch cheezein sab states me common (chawal, roti, dal, chai) aur kuch sirf ek state me (jaise ragi mudde, singju). Traditional khana wahan ki fasal par based hota hai; fasal mitti aur mausam par. Isliye khane me diversity.

Q. Activity 3.3 - Bujurgon se interview

Ans. Findings: pehle chulhe aur sil-batta, ab gas aur mixer. Naya khana: pizza, noodles; purana khana abhi bhi: dal-roti. **Karan:** technology, transport, communication.

Q. Activity 3.4 - Survey (vitamin/mineral lakshan)

Ans. Chart 3.5 se lakshan dekhkar rog pehchano, jaise gale me sujan = goitre (iodine ki kami). Khane me badlaav batao aur doctor se milne ko kaho.

Q. Activity 3.5 - Starch test (Table 3.3)

Ans. Starch hai (neela-kaala): aloo, chawal, ubla chana, roti/bread. Cucumber me bahut kam/nahi. Peanut, tel, butter me nahi.

Q. Activity 3.6 - Fat test

Ans. Tel ka daag: peanut, butter, tel, nariyal. Aloo, cucumber, chawal me nahi.

Q. Activity 3.7 - Protein test

Ans. Violet rang: ubla chana, peanut (aur dal, soyabean). Aloo, cucumber me nahi ya bahut kam. Peanut me protein aur fat dono. Aisa koi food nahi jisme kuch bhi nutrient na ho (cucumber me paani-fibre zyada hai).

Q. Activity 3.8 - Mera diet balanced hai?

Ans. Check karo ki dal/doodh (protein), roti/chawal (carb), ghee/tel (fat), phal-sabzi (vitamin-mineral, fibre) aur paani sab hain ya nahi. Jo kam ho use badhao.

Q. Activity 3.9 - Wafers ya roasted chana?

Ans. Roasted chana, kyunki usme fat kam, protein aur fibre bahut zyada hai. Potato wafers junk food hain.

8. Let us enhance our learning - Answers

Q. Q1. Odd one out

Ans. (i) Chana - baaki teen (jowar, bajra, ragi) millets hain; chana dal/pulse hai. (ii) Rice - baaki teen (rajma, moong, soya) protein-rich pulses hain; rice carbohydrate ka source.

Q. Q2. Traditional vs modern cooking

Ans. Traditional: chulha, sil-batta, mitti ke bartan; modern: gas stove, mixer-grinder, microwave. Modern me samay bachta hai aur aasaan hai; traditional me local aur taza saamagri, kai baar zyada poshak.

Q. Q3. Ravi ke 2 sawaal "good food medicine hai"

Ans. (1) Kya vitamin C se bhara phal khane se scurvy theek ho jaata hai? (2) Kaun sa khana kis rog se bachata hai aur kitna khana chahiye?

Q. Q4. Swaadisht khana healthy nahi aur healthy khana swaadisht nahi

Ans. Sach hai. Jaise samosa, pizza, mithai swaadisht par zyada tel/sugar wali; karela, lauki healthy par kuch ko pasand nahi. Isliye balanced aur kam matra me khana chahiye.

Q. Q5. Medu ka diet (vegetables nahi, biscuit-noodles-white bread)

Ans. Use roughage ki kami hai, isliye pet dard aur kabz. Usse hari sabzi, phal, sabut anaaaj, dal, paani khana chahiye aur biscuit-noodles kam karna chahiye.

Q. Q6. Reshma ko kam roshni me dikhne me dikkat

Ans. (i) Night blindness (ii) Vitamin A ki kami (iii) Papita, gajar, aam, doodh.

Q. Q7. Canned juice, fresh juice, fresh phal

Ans. Fresh phal, kyunki usme fibre aur vitamins poore hote hain. Juice me fibre kam; canned juice me sugar aur preservatives.

Q. Q8. Gourav ka fracture

Ans. (i) Calcium haddi ko mazboot banata hai. (ii) Vitamin D calcium absorb karne me madad karta hai. (iii) Sawaal: Kya sirf calcium ya sirf dhoop/doodh se theek ho jaata? Kya ek hi saath dene se jaldi theek hoga?

Q. Q9. Sugar iodine se neela-kaala kyun nahi hota?

Ans. Kyunki iodine test sirf starch ke liye hai. Sugar carbohydrate hai par starch nahi.

Q. Q10. "Sab starch carbohydrate hain par sab carbohydrate starch nahi"

Ans. Sahi hai. Starch ek type ka carbohydrate hai; sugar aur glucose bhi carbohydrate hain par starch nahi. Activity: aloo, chawal, sugar, glucose par iodine daalo. Sirf aloo/chawal neela-kaala honge, sugar/glucose nahi.

Q. Q11. Iodine socks par nahi, saree par neela-kaala

Ans. Saree cotton (starch/kalf wali) hogi, usme starch hai. Socks synthetic/nylon ya bina starch ke honge.

Q. Q12. Millets healthy kyun? Sirf millet kafi hain?

Ans. Millets me vitamins, iron, calcium, fibre hain, aur har mausam me ugte hain. Par sirf millets kafi nahi, kyunki protein, vitamin C, vitamin D aadi ki bhi zaroorat hai. Balanced diet chahiye.

Q. Q13. Solution iodine hai ya nahi?

Ans. Ek aloo/starch ke tukde par solution ki 2-3 boond daalo. Agar neela-kaala ho jaaye to wo iodine ho sakta hai.

9. Important Q&A (exam ke liye)

Q. Nutrients kitne prakaar ke hain?

Ans. 5 mukhya: carbohydrate, fat, protein, vitamins, minerals. Saath me roughage aur paani.

Q. Balanced diet kya hai?

Ans. Jisme saare nutrients, roughage aur paani sahi matra me ho.

Q. Food miles kya hain? Kam kyun karein?

Ans. Khana producer se consumer tak jitna door jaata hai. Kam karne se kharcha, pollution kam; local kisan ko fayda; khana taaza.

Chapter ka Naam (copy-paste)

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