

Nutrition: fresh, whole foods or ultra-processed?

Lesson at a glance

Open with a fresh apple beside a fruit-flavoured snack pack and ask what clue on a packet shows how much a food has been changed. Teach whole, a bit processed, ultra-processed and the ingredients list, then pairs predict for oats vs sugary cereal and apple vs fruit snack. Groups run three checks on real packs or printed cards, record on the Investigation Journal, then place eight foods on the ingredients-detective interactive. Close with a picture-or-list vote.

Learning objectives

- Use an ingredients list as evidence of how much a food has been changed from its natural state
- Place everyday foods on a whole-to-ultra-processed spectrum and justify the placement

Before the bell: prep

Decide Option A (clean empty packs) or B (print the eight ingredients cards) before the day. Need one class apple, oats/cereal/fruit-snack trays per group, plus plain yoghurt, brown bread, fruit yoghurt and crisps cards for the class consolidation and any borderline debate. Check allergy lists; wipe packs; no tasting.

Materials

Item	Qty	Per	Source	Low-cost substitute
fresh apple (class reference only)	1	class	supermarket	clear IWB photo of a whole apple, or any whole fresh fruit with a peel such as a banana or pear
plain porridge oats packet (clean, empty or sealed sample)	1	group	supermarket	one class oats packet passed between groups, or printed ingredients card for porridge oats
sugary breakfast cereal box (clean, empty)	1	group	brought from home	one or two class boxes at stations, or printed ingredients cards matching the interactive lists
fruit-flavoured snack or drink packaging (clean, empty, full ingredients list visible)	1	group	brought from home	printed ingredients card for a fruit-flavoured snack from the lesson list
printed ingredients cards for eight everyday foods: apple, oats, plain yoghurt, brown bread, fruit yoghurt, cereal, fruit snack, crisps	1	group	provided printable	project lists on the IWB and run as two teacher-led stations
optional extra clean empty packaging for borderline debate (plain yoghurt pot, brown bread bag, crisps packet)	1	class	brought from home	name cards for any disputed borderline food
trays or large clear bags for group packaging or card sets	1	group	classroom	cardboard box lids
scrap paper for three-check scaffold during tray work	1	group	classroom	jot straight onto the Investigation Journal page during the tray work
Investigation Journal page	1	pupil	provided printable	ruled paper with a simple comparison layout the pupil draws

Safety watch-point

No tasting. Check allergy lists before packs; reassign or use printed cards. Wipe tables after handling packaging; wash hands; keep dusty packs away from faces.

Teaching moves

- **Getting Started:** Hold the apple beside the fruit-snack pack or card. Ask only: what clue on a packet could tell us how much a food has been changed? Accept front-of-pack ideas, then gently steer toward the ingredients list without naming whole or ultra-processed yet.
- **How much has this food been changed?:** Teach the four ideas one at a time with a spoken example each. Pause after whole and ultra-processed for class call-outs. Model the wonder-predict-test-observe-think cycle aloud on apple vs snack; do not write the finding up. Stress that the list on the back beats the front claim, and that freezing or tinning is useful processing.
- **Question and predict:** Agree the child-friendly question, then pairs predict for both pairs. Prompt: where will sugar sit on the cereal list, and what is the apple's "list"? Take two or three shares and do not confirm answers; then each pupil writes the prediction on the journal page.
- **Compare the pairs:** Issue trays or cards. The three checks are on the board, and groups jot them on scrap paper or in the journal table. Groups complete all three checks now, then choose which check they will weight most in their spoken reason. Circulate: evidence from the list, not the picture? Reassign packs if allergies apply.
- **Record on your Investigation Journal:** Send pupils to the journal before any class spectrum so the page stays their own pair test. Say aloud what to record: pairs compared, three checks per food, then which food was more changed and which check they weighted. Oral-rehearse the evidence sentence for writers who need it.
- **Ingredients detective:** Open the Ingredients detective interactive on the IWB; you drag, the class agrees, and there is no score. Full justification first on the four tray foods plus disputed fruit yoghurt or crisps; quick-place plain yoghurt and brown bread. Accept well-evidenced borderline disagreement.
- **Picture or list?:** Settle only one or two disputed items with one list-based reason each. Then hands-up: when front and back tell different stories, which clue is stronger? Two pupils justify from today's journal notes. Skip disputes if Step 6 already settled them.
- **Make sense and tidy:** Partner talk on list clues for whole vs ultra-processed, then revoice: short recognisable lists vs long lists with sugar high and factory words; middle ground is fine. Collect packs for reuse, wipe tables, wash hands; no food eaten.

What it should show

Apple and porridge oats sit at whole (one-word lists). Plain yoghurt and brown bread sit a bit processed. Sugary cereal and fruit-flavoured snack sit ultra-processed (long lists, sugar near the front, flavouring/colour). Fruit yoghurt and crisps are borderline: either justified zone is fine. Odd placements usually come from reading the front slogan instead of the list, or counting natural fruit sweetness as added sugar.

Misconceptions & interventions

- **“It says natural / shows fruit on the front, so it must be a whole food.”** Point back to the snack pack: fruit on the front, sugar leading the list. Ask which clue is evidence and have them re-run the three checks on the back.
- **“Anything in a packet is bad / ultra-processed.”** Hold up oats or plain yoghurt: short kitchen-ingredient lists. Revoice that freezing, tinning and baking can be useful; today’s skill is how much a food has been changed.
- **“The apple is sweet, so sugar must be on its list.”** With the apple in hand, separate natural sweetness inside fruit from sugar written as an added ingredient. Board note: apple list = apple; added sugar not listed.

Differentiation

Emerging	Developing	Proficient
• Oral-rehearse the evidence sentence at the teacher table before journal writing; allow a quick re-check of one pack or card. • On disputed items, restate a clear whole-food reason for apple or oats using list length only.	• Choose which of the three checks to weight most and say why before writing the conclusion. • Link one interactive placement back to the matching pair already on their journal.	• Justify a borderline item (fruit yoghurt or crisps) in a full sentence citing sugar/salt position or unrecognisable ingredients. • Explain why two groups could weight different checks and both still use valid list evidence.

Cross-curricular hook

SPHE healthy-choices link: the same list-reading skill applies when picking a lunchbox snack or breakfast cereal.