

Nutrition: fresh, whole foods or ultra-processed?

Lesson at a glance

Hold up a fresh apple beside a fruit-flavoured snack pack (or card) and ask what packet clue shows how much a food has been changed. Teach whole, a bit processed, ultra-processed and the ingredients list, then pairs predict on oats-vs-cereal and apple-vs-snack. Groups run three checks on trays or printed cards, record pair evidence on the Investigation Journal, then place everyday foods on a spectrum with the ingredients-detective interactive and settle whether the front picture or the list is stronger.

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: oats, cereal, fruit snack per group or shared) or Option B (print the canonical ingredients cards). Bring one class apple; optional plain oats. Check the allergy list; wipe packs; no tasting. Project the three-check scaffold before trays go out.

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 (eight canonical lists from Step 1 teacher notes: 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 allergies before any nut/milk/gluten packaging; reseal in clear bags if needed; wipe tables; wash hands after handling packs.

Teaching moves

- **Getting Started:** Hold the apple beside the snack pack or card only — do not hand trays out yet. Ask one curiosity question about what clue shows how much a food has been changed; accept pictures and slogans, then steer gently toward the ingredients list without naming the full spectrum.
- **How much has this food been changed?:** Project one or two terms at a time and pause for a quick oral example after whole and ultra-processed, then name a bit processed and the ingredients list. Model the apple-vs-snack cycle yourself (wonder, predict, read both lists, observe, conclude) without printing the answers. Say once that fruit sweetness is not the same as sugar written as an added ingredient.
- **Question and predict:** Agree the child-friendly question: which food in each pair has been changed more, and what does the list show? Pairs predict oats vs cereal and apple vs snack aloud; two or three pairs share. Do not confirm — listen for list length, sugar position or hard-to-picture words.
- **Compare the pairs:** Issue trays or cards (oats, sugary cereal, fruit snack) plus the class apple note on the board. Groups complete all three checks now: count, how many they recognise, where added sugar/salt sit. Then each group chooses which check they will weight most in their spoken reason. Circulate: 'Is the front picture enough, or do you need the list?'
- **Record on your Investigation Journal:** Write-up before the class spectrum so the journal stays their own pair test. Point to the fields: pairs compared; for each food the three checks; conclusion naming which check they weighted. Oral rehearsal first for weaker writers: 'The cereal was more changed because...' Separate list evidence from 'I like it'.
- **Ingredients detective:** Open ingredients-detective in explore mode on the IWB — teacher drags, no pupil devices or scores. Full-justify the four tray foods plus one disputed item; quick-place plain yoghurt and brown bread. For fruit yoghurt and crisps, accept either justified ultra-processed or high-end a-bit-processed placement; do not force one card tag.
- **Picture or list?:** Only reopen one or two disputed items with one list-based reason each. Then hands-up vote: when a fruit-snack front shows fruit but sugar leads the list, which clue is stronger? Two pupils justify from today's recording. Skip the dispute round if Step 6 already settled the borderlines.
- **Make sense and tidy:** Prediction surprises, list clues for whole vs ultra-processed, why the list beats the front slogan. Revoice that middle-ground processing can keep food safe. Collect packs for reuse, wipe tables, wash hands; no food from packs is eaten.

What it should show

Apple and porridge oats show one short, recognisable entry; sugary cereal and fruit-flavoured snack show longer lists with sugar near the front plus factory words (glucose syrup, flavouring, colour). Plain yoghurt and brown bread sit middle; fruit yoghurt and crisps often spark borderline debate. Odd placements usually mean reading the front claim instead of the list, or treating fruit's natural sweetness as added sugar — re-read the ordered list together.

Misconceptions & interventions

- **'It says natural / shows fruit on the front, so it must be a whole food.'** — Hold the snack pack front beside its list: sugar first, then flavouring and colour. Ask which clue is evidence scientists would use, and place from the list only.
- **'Any processing means the food is bad or ultra-processed.'** — Point to plain yoghurt or brown bread: short kitchen ingredients, useful change (cultures, baking). Revoice today's question — how much has it been changed, not whether processing exists.
- **'The apple is sweet, so it has added sugar like the snack.'** — Return to the board note: apple list is just apple; added sugar means sugar written as an ingredient. Contrast with sugar near the front of the snack or cereal list.

Differentiation

Emerging	Developing	Proficient
• Pair at the teacher table with one clear pack or card; oral three-checks first, then scribe the counts and a stem sentence: '___ was more changed because the list...' • Start only with apple vs fruit snack before oats vs cereal.	• After the three checks, name which check they weighted most and say why before writing the journal conclusion. • Compare their journal placement with one matching card on the ingredients-detective spectrum.	• Lead the borderline case (fruit yoghurt or crisps) with a full evidence sentence linking sugar/salt position and unrecognisable ingredients. • Critique a front-of-pack fruit claim using only list evidence from today's notes.

Cross-curricular hook

Link to SPHE healthy choices: the same list-reading skill pupils can use on a real Irish lunchbox or breakfast pack at home.