

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 between Option A (clean empty packs: oats, cereal, fruit snack per group or shared) and Option B (print the canonical ingredients cards). Bring one class apple, plus plain oats if you have them. Check the allergy list and wipe the packs beforehand, and there is no tasting at any point. Have the three-check scaffold projected before the 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 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 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 — you do the dragging while the class works from their seats, with devices and scores left out of it. 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, leaving the card tag open.
- **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:** Round up on the prediction surprises, the list clues for whole vs ultra-processed, and why the list beats the front slogan. Revoice that middle-ground processing can keep food safe, then collect packs for reuse, wipe tables and 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.