# Compact Cheat Sheet: Harmful / Allergenic & Restricted Ingredients (English sources)

Purpose: Short reference to ingredients on product labels that are relevant for people with celiac disease (gluten), lactose intolerance, diabetes (high sugar), cardiovascular risk (trans fats), processed meat/nitrite concerns, sulfite sensitivity, and for vegan/vegetarian consumers.

## Gluten — (Celiac disease / gluten sensitivity)

Why avoid: Autoimmune reaction causing intestinal damage in celiac disease; even small amounts can harm those with celiac disease.  
Common label terms / ingredients to watch for: wheat, wheat flour, durum, semolina, spelt, kamut, triticum, bulgur, couscous, barley, malt, malt extract, malt flavoring, rye, brewer's yeast, hydrolyzed wheat protein, modified wheat starch, maltodextrin (if from wheat), oats (unless certified gluten free).  
Typical sources: bread, pasta, cereals, sauces, beer, seitan.  
Quick tip: Look for explicit “gluten free” label (US/EU standard ≤20 ppm).

## Lactose / Milk — (Lactose intolerance & milk allergy)

Why avoid: Lactose intolerance causes GI symptoms (bloating, gas, diarrhea); milk allergy is immune mediated.  
Common label terms / ingredients to watch for: milk, lactose, milk solids, nonfat dry milk, skimmed milk powder, whey, whey powder, whey protein, casein, caseinate, lactose, curds, butter, ghee (small lactose), cream, condensed milk, milk protein, buttermilk, lactalbumin, milk sugar.  
Typical sources: dairy, many baked goods, sauces, processed foods (may contain milk derivatives).  
Quick tip: Lactose free products or lactase enzyme drops; many aged cheeses have very low lactose.

## High Sugar / Added Sugars — (Diabetes / glycemic control)

Why avoid/limit: Rapid blood glucose rises from simple sugars and many syrups increase diabetes risk and complicate glucose control.  
Common label terms / ingredients to watch for: sugar, sucrose, high‑fructose corn syrup (HFCS), corn syrup, glucose, dextrose, fructose, invert sugar, maltose, malt syrup, syrup, cane sugar, panela, molasses, concentrated fruit juice, agave syrup, maltodextrin.  
Typical sources: soft drinks, sweets, sweetened yogurts, pastries, sauces and condiments (ketchup), breakfast cereals.  
Quick tip: Check “total carbohydrates” and “of which sugars” on nutrition facts; portion control matters.

## Trans fats & Partially hydrogenated oils — (Cardiovascular risk)

Why avoid: Industrial trans fats raise LDL cholesterol and increase heart disease/stroke risk; WHO has pushed for global elimination of industrial TFA.  
Common label terms / ingredients to watch for: partially hydrogenated oil, hydrogenated vegetable oil, margarine, vegetable shortening, hardened vegetable fat, shortening, interesterified fat (check details).  
Typical sources: some margarines, commercial baked goods, fried fast foods, prepackaged snack foods.  
Quick tip: Some countries require “0 g trans fat” or list partially hydrogenated oils—avoid products containing them.

## Sodium nitrite / Nitrates in processed meat — (Processed meat/ cancer concerns)

Why avoid/limit: Nitrates/nitrites used for curing can form N‑nitroso compounds; processed meats have been classified by IARC as carcinogenic (colorectal cancer association).  
Common label terms / ingredients to watch for: sodium nitrite, sodium nitrate, nitrites, nitrates, curing salt, pink salt, cure #1 / Prague powder, celery powder/juice (used as “natural” source of nitrates).  
Typical sources: bacon, ham, hot dogs, sausages, salami, some cured deli meats.  
Quick tip: “No nitrites added” labels may still use natural nitrate sources (celery) — the chemistry is similar.

## Sulfites — (Asthma / sulfite sensitivity)

Why avoid: Sulfites (SO₂, sulfite salts) can trigger bronchospasm in sensitive people, especially those with asthma.  
Common label terms / ingredients to watch for: sulphites, sulfur dioxide, sodium sulfite, sodium bisulfite, sodium metabisulfite, potassium bisulfite, potassium metabisulfite, E220–E228.  
Typical sources: dried fruits, wine, some processed potatoes, canned seafood, pickles.  
Quick tip: In many regions sulfites must be declared when >10 ppm—look for E‑numbers or chemical names.

## Monosodium glutamate (MSG) & Flavor enhancers

Why note: FDA and other authorities consider MSG safe for most people, but some individuals report short‑term sensitivity (headache, flushing) — labelled when added.  
Common label terms / ingredients to watch for: monosodium glutamate, MSG, hydrolyzed vegetable protein, autolyzed yeast extract, yeast extract, glutamate, natural flavors (sometimes hide glutamates).  
Typical sources: savory snacks, soups, bouillon cubes, sauces.  
Quick tip: If you are sensitive, avoid foods listing MSG or hydrolyzed proteins.

## Artificial sweeteners & sugar substitutes

Why note: Regulatory bodies (EFSA/FDA/WHO/JECFA) monitor acceptable daily intakes; recent re‑evaluations led to continuing study of long‑term effects for some compounds.  
Common label terms / ingredients to watch for: aspartame (E951), sucralose (E955), saccharin (E954), acesulfame‑K (E950), neotame (E961), stevia/steviol glycosides (plant‑derived), sugar alcohols (sorbitol, xylitol).  
Typical sources: diet drinks, sugar‑free gums, ‘light’ desserts, tabletop sweeteners.  
Quick tip: People with PKU must avoid aspartame (contains phenylalanine); monitor total intake if concerned.

## Vegan & Vegetarian quick label reference

Vegan/Vegetarian notes: Many animal‑derived ingredients are not obvious on labels. Below are common non vegan ingredients and how they may appear on ingredient lists.  
Common non vegan label terms: gelatin (gelatine), isinglass, cochineal / carmine / E120 (red color from insects), shellac, beeswax, honey, lactose, casein, whey, albumin/egg white, fish sauce, anchovy, fish gelatin, lard, tallow, rennet (or “enzymes” from animal stomach), bone char (used in sugar refining — not listed on pack).  
Vegetarian caveats: Some cheeses use animal rennet; look for “microbial rennet” or “vegetarian rennet” if needed.  
Quick tip: For strict vegans, check for “suitable for vegans” certification or contact manufacturer for processing/filtration aids.

## Short list of English authoritative sources (for deeper research)

- World Health Organization (WHO) — trans fats, aspartame assessments, processed meat (IARC)  
- U.S. Food and Drug Administration (FDA) — ingredient safety & labeling (MSG, sweeteners, food additive pages)  
- European Food Safety Authority (EFSA) — sweeteners, additives evaluations  
- NHS / Mayo Clinic / Celiac Disease Foundation — patient‑facing guidance on celiac disease & lactose intolerance  
- IARC / PubMed / NCBI — primary studies and reviews on nitrates/nitrites and cancer associations  
- Open Food Facts (openfoodfacts.org) — ingredient lists database and API for scraping ingredient labels  
- Food Allergy organizations (FARRP, Anaphylaxis UK) — sulfite labeling and allergy guidance

## Where to get ingredient data & how to extract

Good data sources & tools:  
- Open Food Facts (global open database) — API to query products and full ingredient lists (English entries available).  
- Manufacturer websites / product Nutrition & Ingredient panels (PDFs). Use PDF text extraction (OCR if image scans).  
- Regulatory databases: FDA (food ingredient/additives), EFSA (additive opinions), Codex Alimentarius.  
- Scientific literature: PubMed / Google Scholar for mechanism or risk studies.  
  
Extraction tips:  
- For bulk product scraping, use the Open Food Facts API to retrieve ingredients. For PDFs, extract text with tools like pdfminer / PyPDF2 or OCR (Tesseract) if scanned.  
- Normalize ingredient strings (lowercase, remove punctuation), expand common synonyms (eg. whey -> whey protein), and map to canonical hazard terms (gluten, lactose, sulfites, nitrite etc.).  
- Keep a small mapping table of aliases to hazard categories (the mapping in this cheat‑sheet is a ready start).

**Gluten:**  
Found in wheat, barley, rye, malt, and oats. Can cause digestive problems, bloating, and intestinal damage in people with celiac disease or gluten intolerance.  
*Examples:* wheat, wheat flour, durum, semolina, barley, malt, rye, spelt, bulgur, couscous, oat, gluten.

**Milk and Dairy:**  
Contains lactose and proteins like casein and whey. Causes bloating, nausea, or skin reactions in lactose-intolerant or milk-allergic individuals.  
*Examples:* milk, lactose, whey, casein, milk powder, buttermilk, cream, yogurt, cheese, butterfat, ghee.

**Egg:**  
A common allergen, especially in children. May trigger skin rashes, itching, or respiratory reactions.  
*Examples:* egg, albumin, egg yolk, egg white, whole egg.

**Peanut:**  
Highly allergenic and can cause severe allergic reactions, including anaphylaxis.  
*Examples:* peanut, groundnut, peanut butter, peanut oil.

**Tree Nuts:**  
Includes almonds, hazelnuts, walnuts, pistachios, and cashews. Can trigger strong allergic responses.  
*Examples:* almond, hazelnut, walnut, cashew, pistachio, pecan, brazil nut, macadamia, pine nut.

**Soy:**  
Can cause allergic reactions and may affect hormonal balance due to phytoestrogens.  
*Examples:* soy, soya, soybean, soy lecithin, soy protein isolate, textured soy protein.

**Fish and Shellfish:**  
Common allergens that may cause severe reactions, sometimes lifelong.  
*Examples:* fish, salmon, tuna, shrimp, crab, lobster, oyster, anchovy, shellfish, clams.

**Sulfites:**  
Used as preservatives; may trigger asthma and breathing problems in sensitive individuals.  
*Examples:* sulfite, sulphite, sulfur dioxide, sodium metabisulphite, potassium metabisulphite, E220–E225.

**Nitrites and Nitrates:**  
Used in processed meats; excessive intake may increase cancer risk due to formation of nitrosamines.  
*Examples:* sodium nitrite, sodium nitrate, potassium nitrate, curing salt, E249–E252.

**Palm Oil:**  
High in saturated fats, linked to cardiovascular risks. Also criticized for deforestation and environmental harm.  
*Examples:* palm oil, palm kernel, palmolein, hydrogenated palm oil.

**Trans Fats:**  
Formed by hydrogenating vegetable oils. Increases bad cholesterol (LDL) and risk of heart disease.  
*Examples:* partially hydrogenated oil, shortening, vegetable fat, margarine.

**High Fructose Corn Syrup (HFCS):**  
A sweetener associated with obesity, insulin resistance, and fatty liver disease.  
*Examples:* high fructose corn syrup, corn syrup, glucose-fructose syrup, fructose syrup.

**Monosodium Glutamate (MSG) and Flavor Enhancers:**  
Used to enhance taste; may cause headaches, dizziness, and nausea in sensitive people (“Chinese restaurant syndrome”).  
*Examples:* monosodium glutamate, MSG, hydrolyzed vegetable protein, yeast extract, disodium inosinate, disodium guanylate.

**Artificial Colors:**  
Synthetic dyes linked to hyperactivity in children and possible carcinogenic effects.  
*Examples:* E102 (Tartrazine), E110 (Sunset Yellow), E122 (Carmoisine), E124 (Ponceau 4R), E129 (Allura Red), Brilliant Blue, Amaranth, Fast Green.

**Artificial Sweeteners:**  
Chemically produced sugar substitutes. May affect metabolism, gut microbiome, and glucose regulation.  
*Examples:* aspartame, acesulfame K, sucralose, saccharin, cyclamate, neotame, advantame.

**Preservatives:**  
Added to extend shelf life. Some types may cause allergies or have carcinogenic potential.  
*Examples:* sodium benzoate, potassium sorbate, benzoic acid, BHT, BHA, EDTA, calcium propionate.

**Artificial Flavors:**  
Synthetic flavor compounds that mimic natural tastes but can trigger allergic or chemical sensitivities.  
*Examples:* vanillin, artificial flavor, synthetic aroma, nature-identical flavor.

**Processed Meat Additives:**  
Common in sausages, ham, and bacon. High phosphate and nitrite levels linked to increased health risks.  
*Examples:* smoke flavor, cured meat, meat extract, flavor enhancer, phosphate, sodium phosphate.