

1. How large is the UPF/additives opportunity?

We should not publish a single “ultra-processed food industry value.” UPF is a classification applied across beverages, snacks, cereals, frozen meals, bakery, confectionery, meat products, and other categories. Adding the values of HFCS, flavors, sweeteners, preservatives, and finished foods would create substantial double counting.

The defensible construction is an “additive reformulation exposure map.”

Market	Current global estimate	What it tells us
Food additives overall	\$127.2 billion in 2025	Upper-level context for the ingredient system affected by reformulation pressure
Food flavors	Approximately \$16.7-\$21.4 billion in 2025	Large but inconsistently defined; includes natural and artificial flavors
Artificial sugar substitutes	Approximately \$3.48 billion in 2024	Directly relevant to artificial-sweetener substitution
High-intensity sweeteners	Approximately \$2.81 billion in 2025	Overlaps with artificial sugar substitutes; do not add the two
Fructose	Approximately \$5.5 billion in 2025	One report attributes 59.1% to HFCS, implying about \$3.25 billion within its methodology

Food preservatives	Approximately \$3.25-\$3.5 billion in 2025	Includes natural and synthetic systems
Natural preservatives	Approximately \$612 million in 2024, forecast to reach \$1.16 billion by 2034	A closer replacement-market indicator than the entire preservative market

Sources: [Grand View Research food additives](#), [food flavors](#), [fructose](#), [artificial sugar substitutes](#), [high-intensity sweeteners](#), [Future Market Insights preservative forecast](#).

The \$127.2 billion figure is useful as an industry backdrop. It is not DyeConverter's TAM, and it is not the value of additives likely to be eliminated. The actual commercial opportunity is the portion of formulation spending exposed to replacement, testing, supplier discovery, and process validation.

2. What does the evidence actually support?

There is strong evidence supporting reduced UPF exposure and increased reformulation pressure. It does not prove that every individual additive is harmful or should be removed.

The strongest findings are:

- UPFs supplied approximately 55% of calories consumed by Americans age one and older in 2021-2023. The share was 61.9% for youth and 53% for adults. [CDC/NCHS](#)
- In an NIH-controlled feeding trial, participants ate approximately 500 additional calories per day and gained roughly two pounds during two weeks on the ultra-processed diet compared with the minimally processed diet. [NIH](#)
- A major BMJ umbrella review covering 45 pooled analyses and nearly 9.9 million participants found higher UPF exposure associated with increased risk across 71% of the health outcomes examined. The authors also cautioned that the certainty of evidence varied considerably. [BMJ](#)
- FDA and USDA have pursued a uniform federal UPF definition. The very existence of that process increases the possibility of future portfolio screening, procurement standards, labeling action, litigation, and retailer requirements. [FDA UPF information](#)

The report should separate four evidence layers:

1. Health outcomes associated with UPF dietary patterns.
2. Evidence concerning specific additives.

3. Consumer, retailer, and regulatory pressure.
4. The market for viable replacement ingredients.

That distinction protects the report from implying, for example, that the UPF literature alone proves a particular preservative or sweetener causes a particular outcome.

3. We have not adequately priced the data layer

We identified the strategic value of DyeConverter telemetry, but we did not include a real market-pricing benchmark.

There is no meaningful single “average price for a dataset.” Prices depend on category coverage, geography, update frequency, number of users, export rights, API access, historical depth, exclusivity, and whether the buyer can redistribute or train models with the data.

Public benchmarks show the range:

Product or license	Public benchmark
Mintel Market Dynamics report	\$695
Mintel Market Intelligence report	From \$1,995
Mintel Future Of report	\$2,995
SPINS Ignite+	Starts at \$250/month
SPINS emerging-brand offer through Vegpreneur	\$9,500/year for one category; \$12,000 for two
NIQ academic institutional access	\$4,000/year for one dataset; \$7,000 for two; \$10,000 for three
Mintel institutional subscription disclosed in UK procurement	GBP 82,264 for one year

Cross-industry data marketplace study

Median \$1,400/month for live data; \$2,200 one-time for static data

Sources: [Intel report types](#), [SPINS Ignite+](#), [Vegpreneur SPINS offer](#), [NIQ academic pricing](#), [Intel public procurement notice](#), [data marketplace study](#).

These figures are benchmarks, not direct valuations of DyeConverter data. DyeConverter's data could become more valuable than a conventional category report because it captures intent before retail sales occur.

SPINS sees what sold. DyeConverter could see:

- What a formulator is trying to replace.
- Which application and processing constraints are causing the problem.
- Which candidate SKUs make the shortlist.
- Which products fail to produce a confident match.
- Which technical documents are missing.
- Which suppliers receive sample requests.
- Whether a sample progresses to testing or adoption.

That is upstream demand intelligence.

4. The telemetry should be designed as a funnel

The most valuable signals would be:

- Most-searched additives targeted for replacement.
- Fastest-growing replacement searches.
- Search volume by food and beverage application.
- Search volume by process constraint, such as pH, heat, light, shear, water activity, or packaging.
- Supplier SKUs appearing most frequently in qualified matches.
- Supplier SKUs most frequently shortlisted.
- TDS and evidence-document views.
- Sample-request volume.
- Search-to-sample conversion.
- Sample-to-bench-test conversion.
- Bench-test outcomes, where permissioned.
- No-match and low-confidence searches.
- Additive families with insufficient technical coverage.
- Suppliers with the largest data-coverage gaps.

- Demand for ingredients not yet represented in the silo.
- Geographic and regulatory differences in replacement activity.

“What companies are getting the most hits?” should be reported more precisely as:

- Share of qualified match appearances.
- Share of shortlist selections.
- Share of sample requests.
- Conversion from appearance to sample request.
- Conversion adjusted for application and process compatibility.

That prevents the largest supplier from automatically looking “best” simply because it has the most SKUs.

5. Is the data proprietary?

Yes, potentially.

“Proprietary” does not require personal data, demographics, or classic trade secrets. DyeConverter can have proprietary rights in:

- Its normalized ingredient ontology.
- Supplier-SKU mappings.
- Process-compatibility fields.
- Evidence-quality scoring.
- Confidence-score methodology.
- Derived attributes.
- Aggregated search taxonomy.
- Match, sample, failure, and outcome statistics.
- Longitudinal demand indices.

DyeConverter may not own every underlying supplier fact or public scientific datum. But the structured collection, normalization, relationships, scoring, derived measures, and aggregated telemetry can form a defensible proprietary data product.

6. Can the same dataset be sold more than once?

Yes, but the correct term is “non-rival,” not automatically “neutral.”

Use of the data by one customer does not consume it. DyeConverter can license the same aggregated data product non-exclusively to multiple suppliers, brands, investors, PLMs, and ingredient companies.

But two important corrections:

- We should license defined uses, not let purchasers “do whatever they want.”
- The data is neutral only if rankings and methodologies are protected from commercial influence.

Licenses should normally prohibit redistribution, re-identification, competitor surveillance, and model training unless those rights are separately negotiated and priced.

Raw searches should not be sold. A search such as “Brand X needs to replace BHA in a 2027 launch” could expose confidential product strategy. Sell aggregated intelligence with minimum cohort sizes, reporting delays, and no named customer activity without explicit permission.

The strategic conclusion

This is bigger than a side revenue stream.

The ingredient database powers the recommendation engine. The recommendation engine creates search, match, sample, failure, and outcome telemetry. That telemetry improves the engine and simultaneously becomes a commercial intelligence product.

That creates the loop:

Better supplier data -> better matches -> more users -> more intent and outcome data -> stronger intelligence products -> more supplier participation -> better supplier data.

The next report revision should add two full sections:

- “The Additive Reformulation Exposure Map: UPFs, Sweeteners, Flavors and Preservatives”
- “The Economics of Ingredient-Intent Data: Telemetry, Licensing and the DyeConverter Intelligence Layer”

Those sections are currently missing, and they materially strengthen the business case.