

MCP SERVER

NO CODE

CLOUD HOSTED

Open Food Facts MCP

Analyze any food label with a barcode scan.

Open Food Facts MCP connects your AI agent to the world's largest open food product database, letting you analyze nutritional labels instantly. Scan barcodes or search by name to get full macronutrient breakdowns, allergen warnings (gluten, nuts, dairy), and expert grading systems like Nutri-Score and NOVA classification for packaged goods from over 150 countries.

A+ Quality Score 100/100

nutritional-data

barcode-scanning

allergen-detection

food-labeling



The connectivity layer between AI and the world's software.



Vinkius sits between AI and every application. All communication passes through Vinkius Cloud via the Model Context Protocol (MCP) — with governance, observability, and security at every layer.

Your AI Connections Run Through Vinkius Cloud

The world's largest
managed MCP catalog

Vinkius is the connectivity layer where AI connects to the software your business already runs. We handle the hosting, the security, the credentials, the uptime — you get agents that actually do things.

We operate the world's largest managed MCP catalog. Major SaaS platforms, CRMs, databases, and cloud providers — running, monitored, production-ready. This MCP server is hosted and maintained by the Vinkius Cloud for AI Agents.

The agent doesn't manage credentials, doesn't manage uptime, doesn't manage security. Vinkius does.

— Architecture principle

Four Pillars of the Vinkius Runtime

01 — Security by design

Credentials stay encrypted at rest via AES-256. The AI agent never touches raw keys — they're injected into a sandboxed V8 isolate at runtime. Actions are logged, and connections have an emergency kill switch.

03 — Deterministic observability

Eight immutable metrics per endpoint: request volume, p95 latency, error rate, active connections, cost attribution. A live payload feed logs every tool call with mutation detection.

02 — Built on MCP Fusion

This MCP server was built with **MCP Fusion**, the open-source framework (Apache 2.0) that powers the entire Vinkius catalog. Schema-as-firewall strips undeclared fields, compiled PII redaction runs at zero overhead, and cryptographic lockfiles produce git-diffable audit trails.

04 — Autonomous operations

Servers are deployed, monitored, and patched autonomously. New capabilities and security patches ship weekly. Zero-downtime deployments ensure continuous availability across all managed MCP servers.

AES-256

Encryption at rest

Ed25519

PKI vault signatures

24h TTL

Ephemeral session keys

V8 Isolate

Sandboxed execution

One Token. Instant Access.

Every MCP server on Vinkius is accessed through a **Connection Token**. Tokens are generated in the cloud dashboard and produce a unique MCP endpoint URL. Paste this URL into any MCP-compatible client — no SDK required.

A single token can serve **multiple AI clients simultaneously**, or you can issue separate tokens per client for granular access control. Each token tracks its own request count, last activity timestamp, and can be individually enabled or revoked.

MCP ENDPOINT

`https://edge.vinkius.com/{token}/mcp`

Claude



Cursor



VS Code



Windsurf



Grok



Gemini

Security Is the Architecture

Security in Vinkius is not a feature — it's the foundation of the runtime. The gateway enforces multiple independent protection layers between AI agents and third-party APIs.

01 — Ed25519 PKI Vault

Every workspace has an Ed25519 Master Key. Session keys are generated ephemerally (24h TTL) and signed by the Master Key. Credentials never leave the vault boundary.

02 — V8 Isolate Sandboxing

Tool code runs inside isolated-vm V8 isolates with 64 MB memory caps and per-request timeouts. No filesystem access, no network access except through the SSRF-guarded fetch bridge.

03 — SSRF Guard

All outbound HTTP requests are DNS-resolved and validated before execution. Private IP ranges (10.x, 172.16-31.x, 192.168.x, AWS metadata 169.254.x) are blocked at the network layer.

05 — Cryptographic Audit Trail

Every request is signed into a SHA-256 hash chain with Ed25519 signatures. Events form a tamper-proof, SIEM-exportable forensic record.

04 — DLP & PII Redaction

A ResponseGuard pipeline intercepts every tool response. Configurable redaction patterns strip sensitive fields (emails, SSNs, card numbers) before data reaches the AI agent.

06 — Honeypot Trap System

Phantom credentials are injected into isolated environments. If a honeypot is used outside Vinkius infrastructure, the server is quarantined instantly.

Emergency Kill Switch

EU AI Act Art. 14(1)
Compliant

The kill switch is an **emergency halt** mechanism — not a simple toggle. When triggered, it executes three actions atomically:

01 — Server deactivated

The MCP server is immediately taken offline across the entire cluster.

02 — All tokens revoked

Every connection token is invalidated. Total lockout — reconnection blocked until new tokens are issued.

03 — WebSocket connections killed

Active connections terminated via Redis pubsub broadcast. Propagates to every runtime node in the cluster.

Full Visibility. Zero Guesswork.

The Vinkius cloud dashboard includes a full MCP Governance suite — real-time analytics and security controls for production AI operations.

Control Plane

KPI dashboard with request volume, latency, success rate, token consumption, and AI-generated operational briefings.

FinOps

Cost tracking per tool, payload compression savings, budget optimization signals, and consumption trends.

Firewall & DLP

PII redaction activity, sensitive data protection counters, and security event timeline.

Agent Activity

Which AI clients are connecting, how often, and what they're doing — real-time session tracking.

Tool Health

Slowest and most error-prone tools, with actionable root-cause insights and performance baselines.

Incident Log

Error trends, failure rates, status-code breakdowns, and forensic audit trail access.

Get started at cloud.vinkius.com — connect your AI agent in under 60 seconds.

Open Food Facts MCP

2 tools available

Cloud-hosted on Vinkius

This MCP lets your AI client connect directly to a massive food product database. You don't need to know nutrition labels—your agent handles it. By simply scanning an item's barcode or searching for a brand, you pull back comprehensive data: everything from calorie counts and macronutrient profiles to ingredient lists. Beyond the basics, the MCP provides structured scores like Nutri-Score (an A-to-E quality grade) and NOVA classification, which tells you how processed the food is. This capability means your agent can tell a client if an item qualifies as 'ultra-processed' or if it contains specific allergens like soy or nuts. Because this data comes from open source, community-driven sources, it's ideal for health apps, dietary planning tools, and any workflow hosted on Vinkius that needs reliable consumer food information.

Core Capabilities

01 — Determine Nutritional Content

Retrieve the full breakdown of calories, fat, carbohydrates, and protein for a specific product.

02 — Identify Allergens

Check if a food item contains common allergens like gluten, dairy, or tree nuts.

03 — Assess Processing Level

Use the NOVA classification to determine if a product is minimally processed or ultra-processed.

04 — Grade Nutritional Quality

Get the Nutri-Score (A through E) which quickly ranks a product's overall nutritional quality.

05 — Search Product Databases

Look up packaged goods across millions of entries by name, brand, or category.

One Click on Vinkius — From Prompt to Execution

Available at vinkius.com/mcp/open-food-facts — connect your AI agent in three steps.

- 01** Tell your AI client to find information on a food product, either by providing an EAN/UPC barcode number or by giving it a descriptive search query.
- 02** The MCP uses the request to access its vast database and pulls structured data points—nutrients, allergen flags, and scores—for that specific item or category of items.
- 03** Your AI client receives organized JSON output detailing everything from the ingredient list to the Nutri-Score grade, ready for you to display or analyze.

The bottom line is: your agent transforms a label scan or simple text search into clean, actionable nutritional data points.

Built For

Dietitians and wellness coaches who need to verify ingredient claims; food journalists needing quick factual data for articles; or product development teams building health-focused apps. If you're tired of manually cross-referencing nutrition labels from dozens of websites, this is for you.

Dietitian / Nutritionist

Verifying client diets by checking if specific ingredients or product types meet strict nutritional guidelines (e.g., low sugar, gluten-free).

Food Journalist / Editor

Writing articles that compare competing products on the market, using Nutri-Score and NOVA classification to provide objective consumer guidance.

Product Developer

Researching competitor ingredients or validating nutritional claims for a new product formulation before sending it to market.

What Changes When You Connect

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- 01 Know the risks instantly: Use `scan_food_barcode` to see clear allergen warnings for gluten, dairy, and nuts, so you never have to guess what ingredients contain.

 - 02 Understand processing levels: Get the NOVA classification immediately. You can tell your user if a product is barely processed or if it's loaded with industrial additives.

 - 03 Compare products across brands: Running `search_food_products` lets you quickly compare several different items on the shelf to see which one has the best overall score.

 - 04 Quickly assess quality grades: The Nutri-Score grade provides a single, easy metric (A-E) for your agent to report back to users in plain language.

 - 05 Validate claims automatically: Instead of relying on printed packaging text, your AI client gets raw, structured data directly from the source.
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Real-World Applications

Client has a severe nut allergy.

A user asks their agent to check if a new granola bar is safe. The agent uses `scan_food_barcode` on the UPC and immediately confirms that the product contains hazelnut oil, flagging it as unsafe for immediate consumption.

Need to compare three competing cereals.

A user needs a comparison report. They use `search_food_products`, inputting the brand names of three cereals. The agent returns all three products' nutritional data and their respective Nutri-Score grades, allowing for an instant side-by-side analysis.

Investigating a food additive.

A journalist wants to know the processing level of a popular snack. They use ``scan_food_barcode``, which returns the NOVA classification, proving that the item falls into Group 4 (ultra-processed).

Building a diabetes meal planner.

A dietitian wants to check if several potential lunch items are low in sugar. They use ``search_food_products`` and filter by key macronutrient data, allowing the agent to compile a list of suitable options based on reliable numbers.

Patterns to Avoid

Treating it like general web search**X AVOID**

Asking your AI client for 'healthy recipes' or 'local farmer markets'. The MCP cannot fulfill these requests because its scope is limited to packaged food data.

✓ INSTEAD

If you need ingredient details on a specific commercial product, use ``scan_food_barcode`` with the UPC. If you need a comparison of several brands, use ``search_food_products``.

Assuming nutritional completeness**X AVOID**

Thinking that just running a search will give you live calorie counts for fresh produce or cooked meals.

✓ INSTEAD

This MCP is designed only for packaged goods. You must use ``scan_food_barcode`` on the product's barcode to get reliable, structured nutrient data.

Ignoring classification scores**X AVOID**

Accepting a product simply because its protein count looks high, without checking if it's highly processed.

✓ INSTEAD

Always check the NOVA classification and Nutri-Score grade. These metrics tell you *how* good the nutrition is, not just *what* the numbers are.

The Right Fit

Use this MCP if your workflow requires objective, standardized data about packaged consumer goods. Specifically, if you need to know an item's nutritional breakdown, its allergen status, or its processing grade (NOVA/Nutri-Score), connecting to the Open Food Facts database is necessary. Don't use it if you are looking for general recipe ideas, local store inventory, or data on fresh ingredients; those require different types of specialized tools.

Crucially, if your goal is simply to read a product name and get a vague description, this MCP is overkill. You must have the physical barcode or exact brand/product name to leverage either `scan_food_barcode` or `search_food_products`. The strength here is the structured data retrieval, not simple text matching.

Reading food labels has always felt like a guessing game.

Every time you shop or write an article about eating better, you run into this tedious pattern. You have to stop, pull out your phone, remember the UPC code, and then cross-reference ingredient lists for sugars, fats, and common allergens across multiple confusing websites. It's a manual chore that slows down everything.

With this MCP, the process changes completely. You just hand the barcode or the product name to your agent. The system immediately pulls structured data—nutrients, allergen warnings, scores—and presents it in clean text. What you get is certainty, instantly.

Open Food Facts MCP gives you objective food facts.

Manual checking of labels means copy-pasting data from different sources and manually calculating the overall nutritional profile. This process is prone to error, especially when comparing multiple products or verifying allergen content across different batches.

Now, whether you use `scan_food_barcode` or search for items with `search_food_products`, your agent delivers a single source of truth. It's consistent, structured data that removes the guesswork from food analysis.

Open Food Facts: 2 Tools for Data Analysis

These tools let your AI client analyze packaged food labels by scanning barcodes or searching the global product database for nutritional facts and allergen data.

#	TOOL	DESCRIPTION
01	<code>scan_food_barcode</code>	Scan a food product barcode and immediately retrieve its complete nutrient profile, full ingredient list, and allergen warnings.
02	<code>search_food_products</code>	Search the entire global database for packaged foods by name or brand to compare nutritional information and scores across multiple products.

See It in Action

Real prompts you can use once this MCP is connected to your AI agent through Vinkius Cloud.

U Scan barcode 3017620422003



That's Nutella! Here's what I found: Nutri-Score E, NOVA Group 4 (ultra-processed). Per 100g: 539 kcal, 31g fat, 57g carbs, 6g protein. Contains hazelnuts, milk, and soy. Ingredients: sugar, palm oil, hazelnuts (13%), cocoa, skimmed milk powder, whey powder, lecithin, vanillin.

U Search for vegan protein bars with a Nutri-Score of A.



I found several options! For instance, 'Misfits Vegan Protein Bar' often scores well. Another high-ranking product is 'Trek High Protein Flapjack' which features a good Nutri-Score due to its balance of fiber and plant protein.

U What is the NOVA group for a standard can of Coca-Cola?



A standard can of Coca-Cola is classified under NOVA Group 4, which means it is an ultra-processed food product. It also holds a Nutri-Score of E due to its high sugar content.

Frequently Asked Questions

01 How does Open Food Facts MCP handle allergen detection?

It identifies common allergens like gluten, dairy, and nuts using the `scan_food_barcode` tool. The data is flagged directly in the nutrient profile for quick review.

02 Can I use Open Food Facts MCP to find fresh produce nutrition?

No, this MCP focuses solely on packaged food items. You must have a product barcode or brand name to analyze its nutritional data.

03 What is the difference between using `scan_food_barcode` and `search_food_products`?

`scan_food_barcode` works on one specific UPC code for maximum detail. `search_food_products` lets you compare multiple items or brands across a category.

04 Does this MCP provide enough data to determine if food is healthy?

It provides the objective metrics needed, like Nutri-Score and NOVA classification. These scores help your agent guide users on quality, but interpretation requires expert context.

05 Is Open Food Facts MCP reliable for dietary planning?







Yes, it connects to a massive, open source database used by health apps globally, providing structured macronutrients and allergen data necessary for accurate planning.

Go Live in 60 Seconds

Get your connection token from cloud.vinkius.com, then paste the endpoint URL into any MCP-compatible client.

YOUR MCP ENDPOINT

```
https://edge.vinkius.com/[TOKEN]/mcp
```

CLIENT	WHERE TO CONFIGURE
 Claude AI	Profile → Customize → Connectors → "+" → Add custom connector → Paste endpoint
 Cursor	Settings → Features → MCP Servers → "+ Add New MCP Server" → Type: SSE → Paste endpoint
 VS Code	Ctrl/Cmd+Shift+P → "MCP: Add Server" → add <code>"open-food-facts": { "url": "..." }</code>
 Windsurf	MCP Settings → <code>mcp_settings.json</code> → Add endpoint URL
 ChatGPT	Settings → Tools & plugins → Add MCP server → Paste endpoint
 Gemini	Extensions → Add MCP Server → Paste endpoint URL

ASK AN AI ABOUT THIS

Let your preferred AI explain this MCP server

-  **Ask ChatGPT** 
-  **Ask Claude** 
-  **Ask Perplexity** 
-  **Ask Gemini** 
-  **Ask Grok** 

READY TO CONNECT

Open Food Facts is live on Vinkius Cloud.

Get your connection token, paste it into your AI agent, and start building. No SDK. No deployment. Just results.

[Start at cloud.vinkius.com](https://cloud.vinkius.com) →

vinkius.com · support@vinkius.com

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