

M C P S E R V E R

N O C O D E

C L O U D H O S T E D

Bone Health Assessment MCP

Get clinical-grade risk profiles and lifestyle interventions.

Bone Health Assessment MCP provides your AI client with the tools to evaluate bone density risk factors. It analyzes physiological vulnerabilities, checks if nutritional intake meets specific requirements, and generates actionable lifestyle plans based on individual risk profiles.

A+ Quality Score 100/100

bone-health

frax

nutrition

lifestyle

medical-assessment



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.

Bone Health Assessment MCP

4 tools available

Cloud-hosted on Vinkius

You can use this MCP to bring clinical-grade bone health analysis into your AI-driven workflows. Instead of guessing at risk factors, your agent can pull a complete risk summary to identify both modifiable and non-modifiable vulnerabilities. It handles the heavy lifting of comparing current nutritional intake against physiological needs to see if a user is actually getting enough calcium or vitamin D. You can also dig into how gender influences specific risk profiles, allowing for much more precise guidance. Once the assessment is done, your agent can output a specific plan of action, including dietary changes and lifestyle adjustments, to help manage or mitigate bone density concerns.

Core Capabilities

01 — Risk Profiling

Your agent identifies modifiable and non-modifiable bone health risk factors.

02 — Nutritional Validation

The MCP checks if dietary intake meets specific physiological bone maintenance needs.

03 — Gender-Based Analysis

Your AI client can analyze how gender impacts specific physiological vulnerabilities.

04 — Actionable Planning

The tool generates specific lifestyle and dietary intervention plans.

One Click on Vinkius — From Prompt to Execution

Available at vinkius.com/en/ai-agent-connect/bone-health-assessment — connect your AI agent in three steps.

- 01 Subscribe to the Bone Health Assessment MCP on Vinkius.
- 02 Connect your AI client like Claude or Cursor with one click.
- 03 Provide your agent with user data like age, gender, and nutritional intake.
- 04 The agent calls the specific tools to analyze risk and sufficiency.
- 05 Receive detailed risk summaries and intervention plans directly in your chat interface.

Get up and running in minutes by connecting your preferred AI client to the Vinkius-hosted MCP.

Built For

This MCP is built for professionals who need to integrate clinical bone health data into AI-driven health applications or research tools.

Nutritionists

They use the MCP to validate if client dietary intake meets bone health requirements.

Health Tech Developers

They integrate these tools into wellness apps to provide automated risk assessments.

Clinical Researchers

They use the risk summary tools to analyze population-level bone health vulnerabilities.

What Changes When You Connect

- 01 Automates the comparison of nutritional intake against physiological requirements.
- 02 Provides gender-specific risk insights for more accurate assessments.

03 Converts risk data into specific, actionable lifestyle instructions.

Real-World Applications

Personalized Nutrition Coaching

An AI agent uses the nutritional sufficiency tool to tell a user exactly where their calcium or vitamin D intake falls short.

Lifestyle Intervention Design

Your agent generates a custom plan of weight-bearing exercises and dietary shifts for a user with high risk.

Preventative Health Screening

A health app uses the risk summary tool to flag users with high-risk profiles based on age and family history.

Clinical Decision Support

Medical professionals use the gender-specific analysis to better understand patient vulnerabilities.

4 Tools Available

#	TOOL	DESCRIPTION
01	get_gender_specific_analysis	This tool provides deep insight into how a user's gender influences their specific bone health risk profile.
02	get_intervention_plan	Use this to generate a personalized list of actionable dietary and lifestyle changes.
03	get_risk_summary	This tool provides a high-level overview of a user's current bone health risk profile.
04	validate_nutritional_sufficiency	This tool checks if current nutritional intake meets the physiological requirements for bone maintenance.

See It in Action

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

U Assess my bone health risk. I am a 65-year-old female with a family history of bone fragility, daily calcium intake of 800mg, vitamin D status is sufficient, I do not smoke, and I do not drink alcohol.



Your bone health risk profile shows a moderate risk level due to age and family history. Your calcium intake is adequate, and your vitamin D levels are sufficient.

U What lifestyle changes should I make? I am a 45-year-old male, calcium intake is 500mg, vitamin D is deficient, I don't exercise, and I am a smoker.



To improve your bone health, you should increase your calcium intake, address your vitamin D deficiency with supplements, start weight-bearing exercises, and seek smoking cessation support.

U Is my calcium intake enough for my age?



Based on your age and gender, your current calcium intake is insufficient to meet the physiological requirements for bone maintenance.

Frequently Asked Questions

01 What AI clients can I use with this MCP?

You can use this MCP with any compatible client, including Claude, Cursor, Windsurf, and VS Code.

02 Do I need to host the MCP myself?

No. Vinkius hosts and manages the MCP for you, so it is ready to use immediately after you connect.

03 Can this MCP help with specific dietary planning?

Yes. The `get_intervention_plan` tool generates personalized lists of dietary and lifestyle changes based on the assessment.

04 How does it handle gender differences in bone health?

The `get_gender_specific_analysis` tool provides deeper insights into how a user's gender influences their specific risk profile.

05 Is the nutritional analysis based on physiological needs?

Yes. The `validate_nutritional_sufficiency` tool specifically checks if intake meets the requirements for bone maintenance.

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>"bone-health-assessment": { "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

Bone Health Assessment 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 →

vinkius.com · support@vinkius.com

INDEPENDENT PLATFORM DISCLAIMER

Vinkius is an independent platform and is not affiliated with, endorsed by, sponsored by, verified by, or otherwise authorized by Bone Health Assessment. All third-party trademarks, logos, and brand names are the property of their respective owners. Their use in this document is strictly for informational purposes to identify service compatibility and interoperability.

DOCUMENT INFORMATION

Generated	September 2026
MCP Server	Bone Health Assessment MCP
Server ID	01a0b260-1d3e-70c7-9cf9-2e8f0e6452cb
Platform	Vinkius Cloud for AI Agents
Endpoint	https://edge.vinkius.com/{token}/mcp

LICENSE & USAGE

This document is generated automatically by the Vinkius PDF Engine. Content reflects the MCP server configuration at the time of generation and may change as updates are deployed. For the most current information, visit vinkius.com/en/ai-agent-connect/bone-health-assessment.