

**K Ä Ä P Ä B I O T E C H**

COMMITTED TO HEALTHIER HUMANS & ECOSYSTEMS

**Who is KÄÄPÄ Biotech?**







€9M  
Investment  
capital  
deployment.

Grow revenue  
from €3M to  
€50M over next  
4 years.

Supported by the leading  
Global food-tech VC's.

**KÄÄPÄ**  
BIOTECH



ZINTINUS

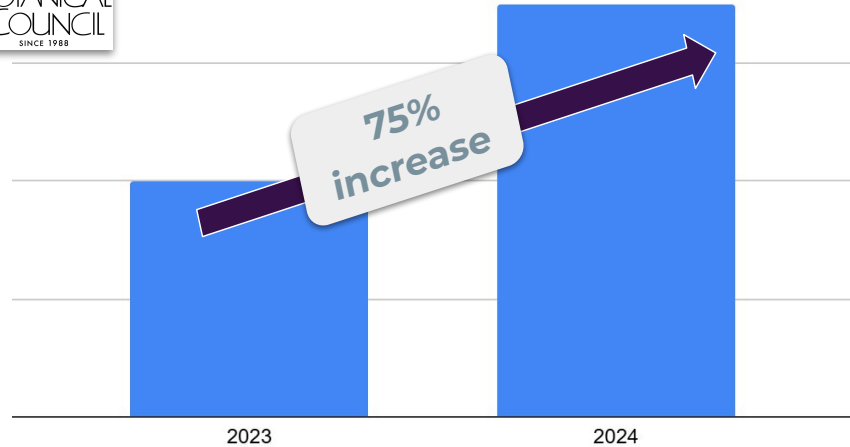
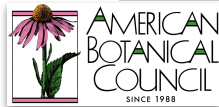
**Brief introduction to the market.**

## Global Functional Mushroom Market 2018-2030. US\$M.



# The Shroom Boom.

USA Functional Mushrooms Market increase YoY



*Sales more than doubled in 2019, 2020, and 2023.*

*The US market has grown 100x in 10 years.*

**Global Functional Mushroom market = \$31B.**

**Expected to grow to \$65B by 2030 / 11%  
CAGR\*.**

# FOUR SIGMATIC®

Established by Finnish founders in 2011 as LUONTOLife, rebranded to Four Sigmatic in 2016.

Four Sigmatic provides mushroom and adaptogen packed blends to improve everyday life.

Valued at \$560M.

*Coffees & Creamers*



*Proteins*



*Supplements*



FORBES > LEADERSHIP > CMO NETWORK

# How Four Sigmatic Made Mushrooms A Multi-Billion Dollar Category

Our focus remained on quality sourcing and maintaining high standards.

Functional mushrooms are transforming the wellness industry.

\*Education over benefits.

Source: Forbes

<https://www.forbes.com/sites/daveknox/2024/11/11/how-four-sigmatic-made-mushrooms-a-multi-billion-dollar-category/>

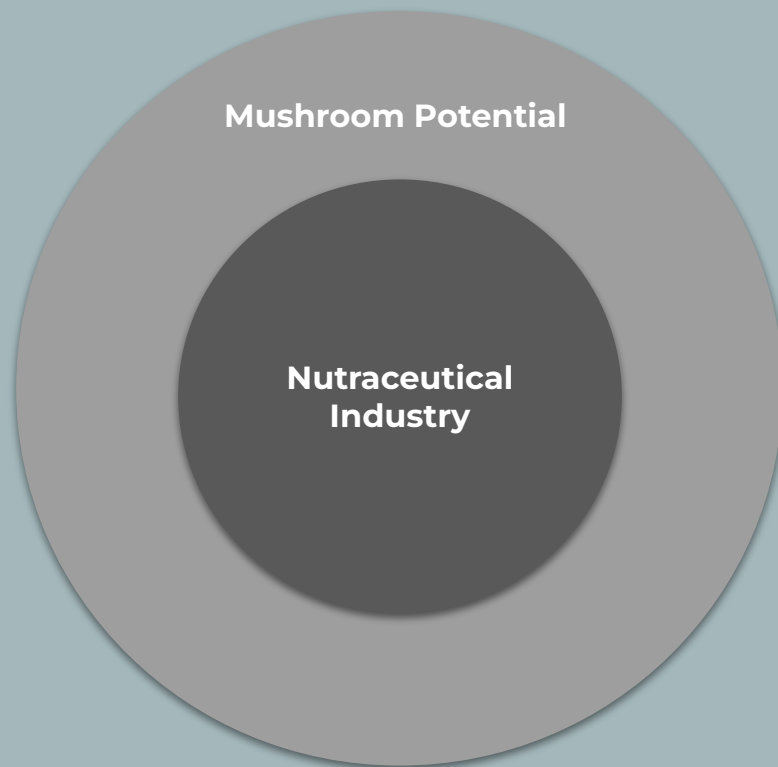
\*<https://www.danielleklemm.com/mushroom>

Functional mushrooms are transforming the wellness industry

A big portion of the nutraceutical industry sales are from herbs - mushrooms have 6 x species than plants.

We currently work with only 7 mushroom species.

Functional Mushrooms are in their infancy.  
The scope is breathtaking.



Our focus remained on quality sourcing and maintaining high standards.

An Italian study showed that only 6 out of 19 samples from the market contained the actual listed mushroom\*.



A US study showed that 74% of reishi mushroom supplements didn't contain reishi mushrooms\*\*.



The biggest industry risk is poor quality material from China.

\*<https://pubmed.ncbi.nlm.nih.gov/36771482/>

\*\*<https://www.nature.com/articles/s41598-017-06336-3>

Education over benefits.

In the early days of being a startup consumer education is important.



In 2024, a Pepsico study showed that 64% of customers had a heavy interest in Lion's Mane\*.



The functional mushroom market has shifted from needing to educate consumers.

Consumers are actively looking for the mushrooms.

**Why is it growing so quickly?**

COVID brought  
natural medicines  
back into the  
spotlight.

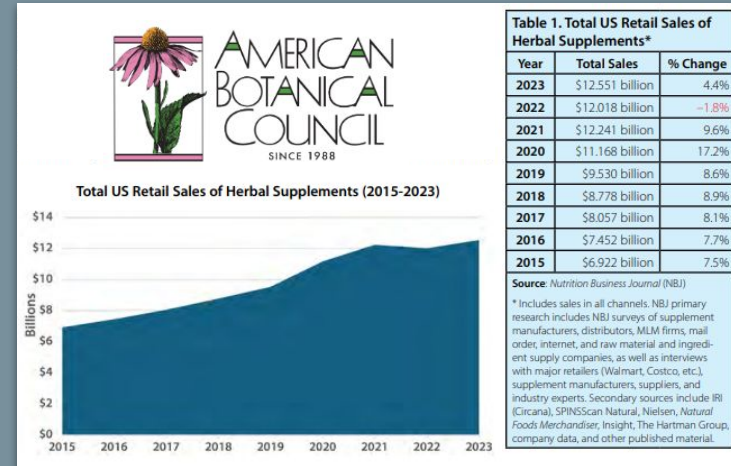
Popular platforms  
are talking about  
them.

**It works.**

COVID brought natural medicines back into the spotlight.



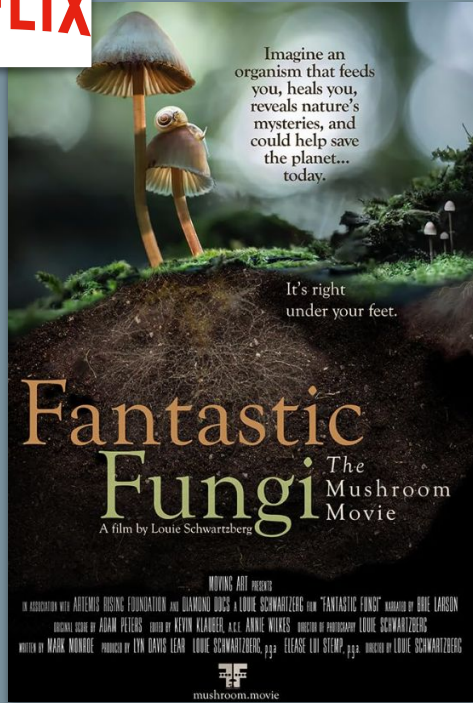
The WHO has stated that trade in medicinal plants, herbal raw materials, and herbal drugs is growing at annual growth rate of about 15%\*



\*<https://www.sciencedirect.com/science/article/abs/pii/B978012814619400001X>

\*\*<https://umb.herbalgram.org/media/jk4f3rzmg/hg141-hmr-web.pdf>

NETFLIX



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The Joe Rogan Experience

### #1035 - Paul Stamets

The Joe Rogan Experience

**About the podcast**

The official podcast of comedian Joe Rogan.

The Joe Rogan Experience  
Joe Rogan

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## Acute Effects of Naturally Occurring Guayusa Tea and Nordic Lion's Mane Extracts on Cognitive Performance

by Michael B. La Monica \* ✉, Betsy Raub 🌱, Ethan J. Ziegenfuss, Shelley Hartshorn, Jodi Grdic, Ashley Gustat, Jennifer Sandrock and Tim N. Ziegenfuss

The Center for Applied Health Sciences, Canfield, OH 44406, USA

\* Author to whom correspondence should be addressed.

*Nutrients* 2023, 15(24), 5018; <https://doi.org/10.3390/nu15245018>

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Ines P. ✓ Verified

24/09/2024



Great product. It helped me regain my focus and concentrating on demanding work. I definitely recommend it.

Item type:  
50ml

Jason H.

01/11/2024 🕒




Your reishi helps me to get to sleep every night. It used to take me hours to fall asleep, but with the help of your tincture it feels like I fall asleep in minutes. Thank you.



It works.

**How did KÄÄPÄ Biotech become an  
industry leader?**



**We don't stop when it gets tough.**

**I'm going to live in Finland.**

*"It's too cold, it's too dark, and the language is too difficult to learn".*

# I'm going to grow Functional Mushrooms in Finland.

*"It won't work! It's too cold, it's too dark, and the climate isn't right".*

**I'm going to put the HQ in  
Karjalohja.**

*“That won't work! It's too remote,  
there's no talent-pool, and the locals  
won't accept you!”*

**The results?**

*KÄÄPÄ Biotech* is Europe's largest and leading functional mushrooms provider.

*NordRelease*® EFSA certified extract ingredients.

Active clinical trial strategy.

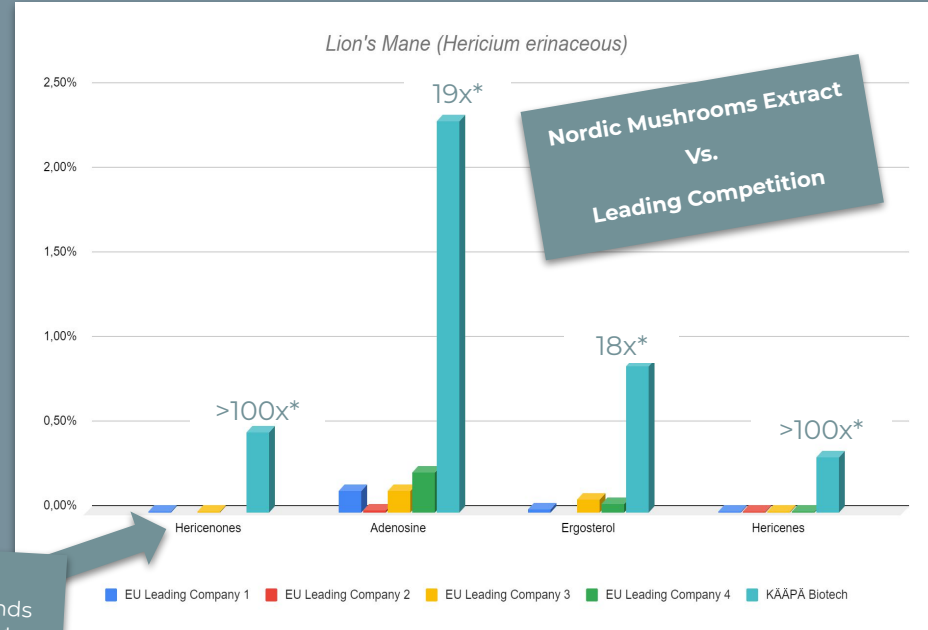


**NORDRELEASE**®



The mushroom strains, years of research, and our pioneering extraction technology means we extract more of the **'good stuff'** than any other company.

**The 'good stuff'.**  
These are the compounds that generate the effects people want from this mushroom (Lion's Mane).



\*average of all competitors tested.

Our products are used globally  
by a range of audiences.



**We have human clinical trials that have been peer reviewed to prove that our mushrooms have positive effects on the human body!**

***“Nordic Lion’s Mane helped improve working memory, complex attention, and reaction time 2 h post ingestion and perceptions of happiness over a 2 h period.”***



# Industry Disruption

	Traditional Mushroom ingredient producers	KÄÄPÄ Biotech
<b>Growing</b>	Industrial production of culinary mushrooms	<b>Optimized for medicinal properties</b> and the highest quantities of the compounds of interest
<b>Extraction</b>	Alcohol and Water extraction	<b>Industry-leading Ultrasonic-Assisted Extraction</b> technology for optimal bioavailability
<b>Quality</b>	Unable to meet EU and US quality requirements for Heavy metals, CFUs, lack batch level medicinal compound testing	Batch Specific testing for heavy metals, CFUs, and <b>first company in the world</b> to bring batch specific medicinal compound testing to the industry
<b>Sustainability</b>	Origin of ingredients China or Russia, lack of transparency in the supply chain, compromised ingredient purity	<b>Carbon Negative &amp; Transparent</b>

*“Finally, a mushroom company that matches the quality and care that our customers demand from us”*

french  
mush

Opella.

LAMBERTS®  
...at the leading edge of responsible nutrition

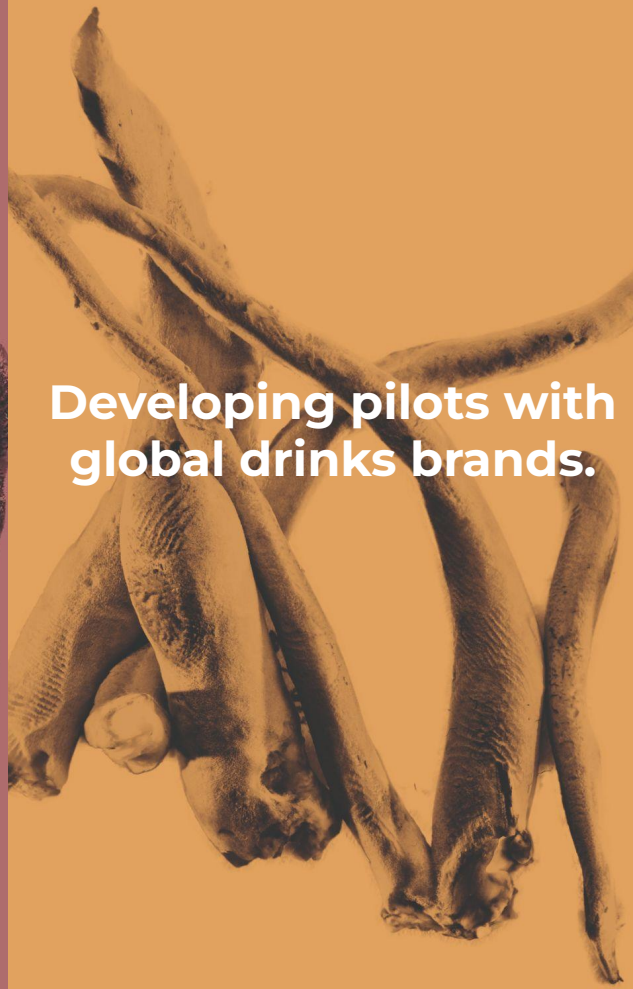
**What does the future look like?**

We've expanded our production capabilities to match the demand.  
5x production capacity during 2025.  
The plan is to 6x by end of 2026.





**Launching pilots with  
Global OTC brands.**



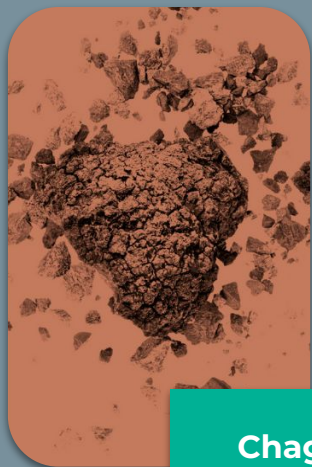
**Developing pilots with  
global drinks brands.**



**4x Clinical Trials in 2026.**

**Continue to disrupt the industry...**

**KÄÄPÄ Biotech** is the **only** company aligning the needs of consumers with the compounds per species.



**Chaga.**

Longevity  
Antioxidants

Inotodiol



**Reishi.**

Calmness  
Sleep

Ganoderic acid



**Lion's Mane.**

Brain health  
Focus

Hericenones  
Hericenens



**Cordyceps.**

Energy  
Endurance

Cordycepin

# KÄÄPÄ Biotech will change the quality standards of the industry.

Polysaccharides

Beta Glucans

Bioactive  
Compounds  
(Beyond Beta Glucans)

Chinese products

Nammex White Paper



K Ä Ä P Ä  
BIOTECH

# KÄÄPÄ Biotech advanced the extraction technology.

Water.  
5% bioavailability.

Dual Extraction, alcohol and water.  
50% bioavailability.

UAE.  
92% bioavailability.

## Ötzi, the Iceman.

Among his possessions were two species of polypore. One of these, the birch fungus, is known to have anthelmintic properties, and was probably used for medicinal purposes.

## Han Dynasty.

Evidence of traditional medicine using mushrooms during the Han Dynasty 202 - 220 AD.

## KÄÄPÄ Biotech.

Introduction of Ultrasonication Assisted Extraction.

3230 BC

202 AD

2019 AD

**KÄÄPÄ**  
**BIOTECH**

**Thank you.**