



**NATURAL
TRACE**

TAG THE FOOD NATURALLY, NOT THE PACKAGING

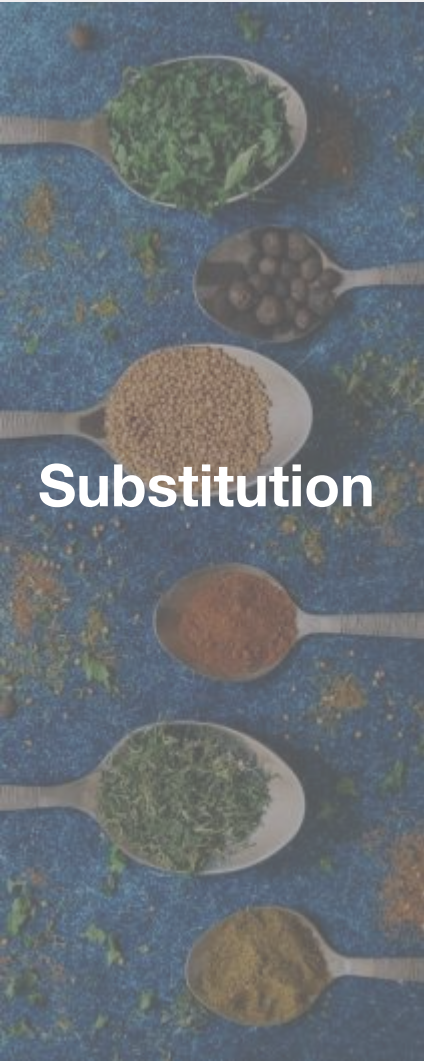
Building Trust. One tag at a time.



\$50B

in Annual Losses to Food Fraud

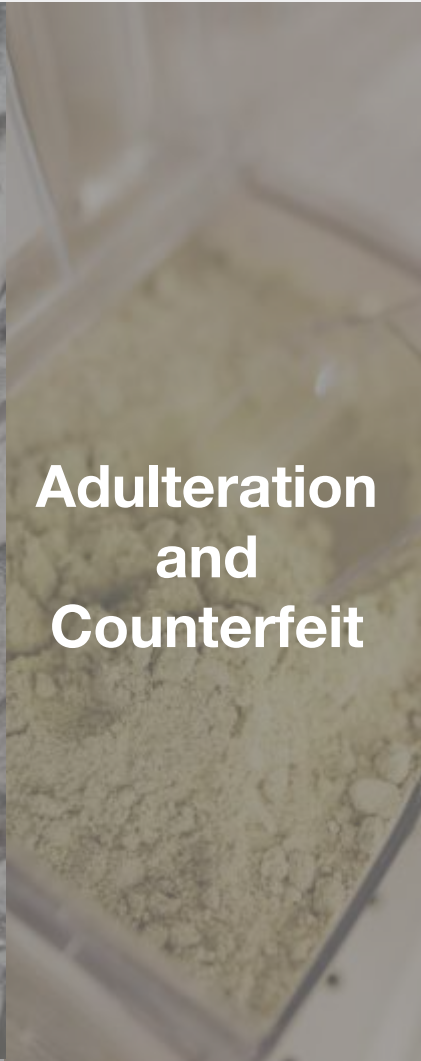
Key Problems Today



Substitution



**Dilution
and
Overrun**



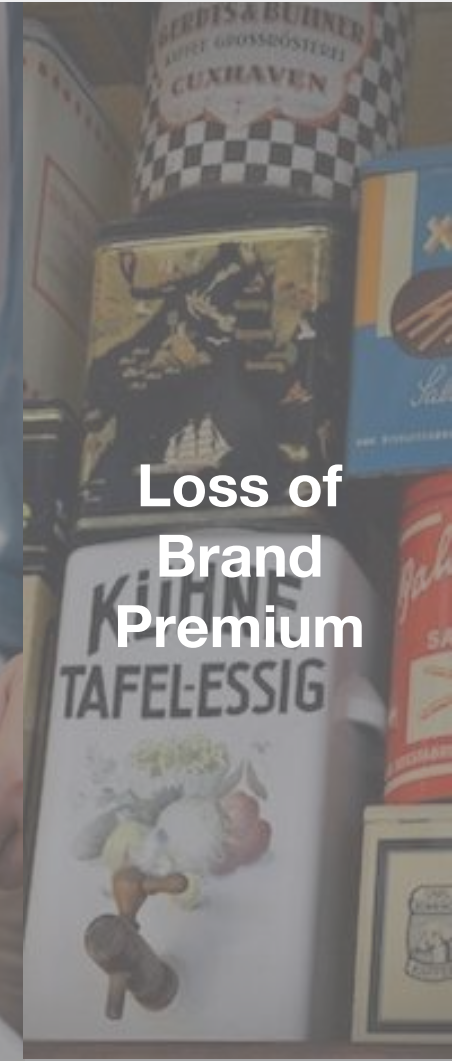
**Adulteration
and
Counterfeit**



**Loss of
Product
Integrity**



**Intellectual
Property
Infringement**

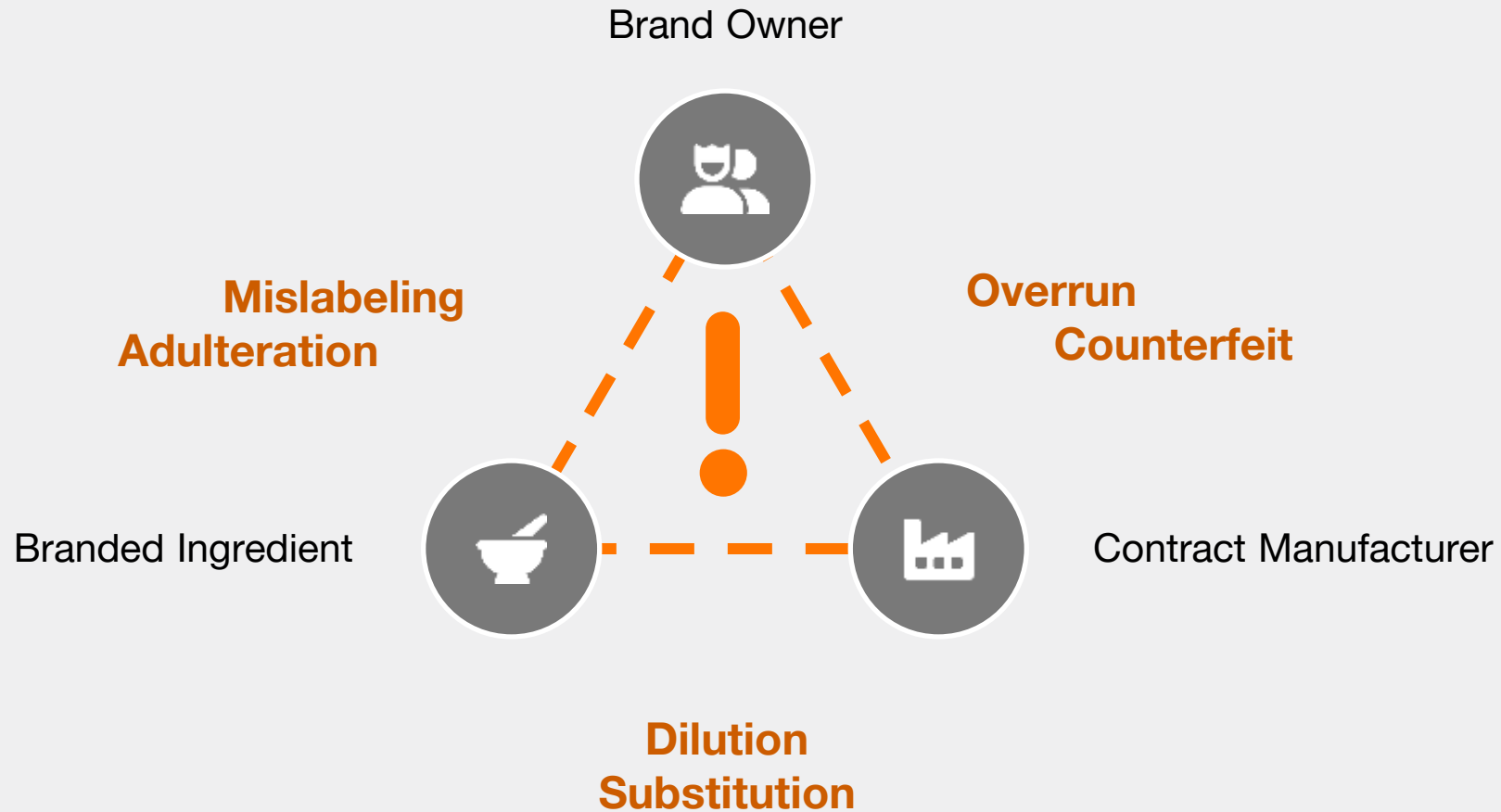


**Loss of
Brand
Premium**

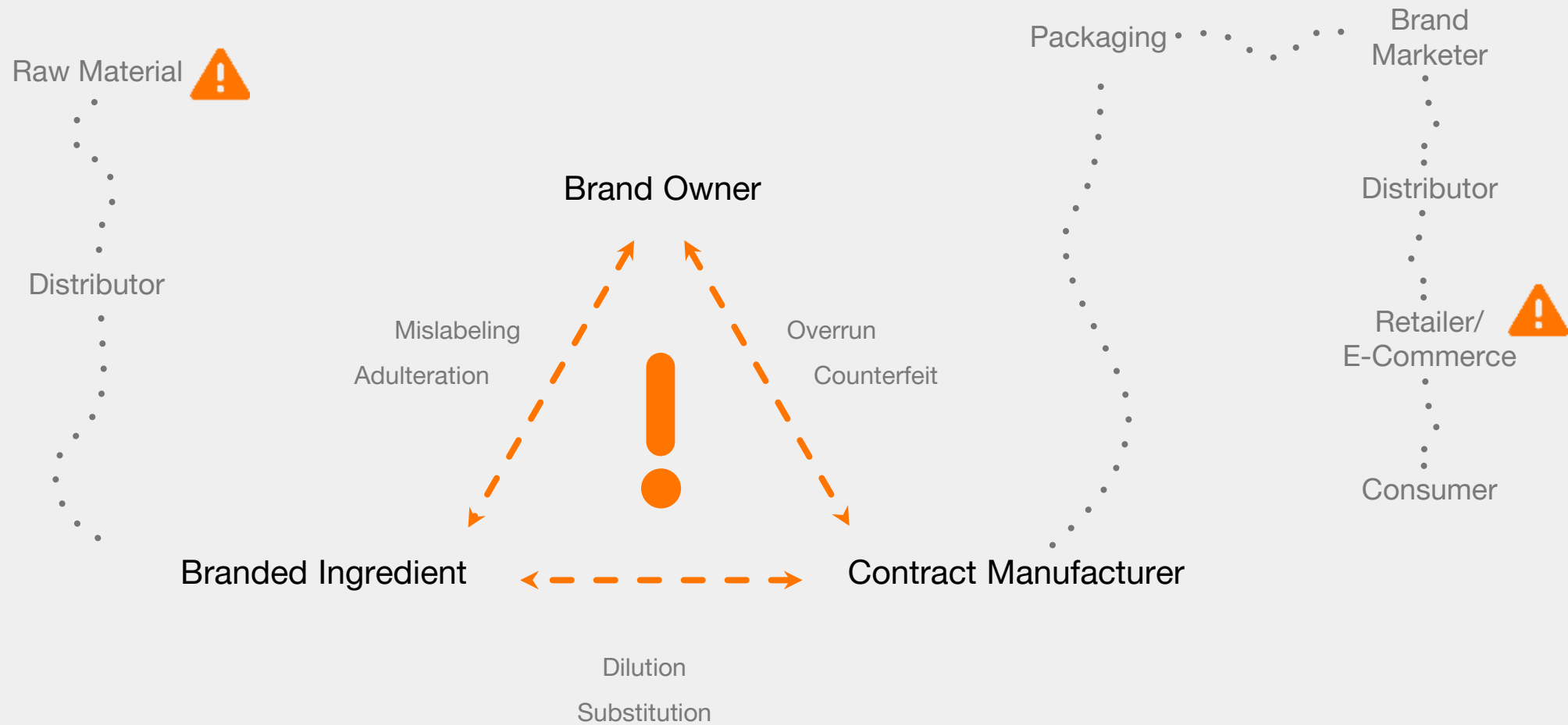
Fraud in Supplements is Significant



Fraud in Nutraceuticals



Complex Supply Chain



How Do We Build Trust?





NATURALTAG™

- Inactivated probiotics
- Food safe, GMO-free
- Low dosage (PPM), zero sensory impact



NATURALDETECT

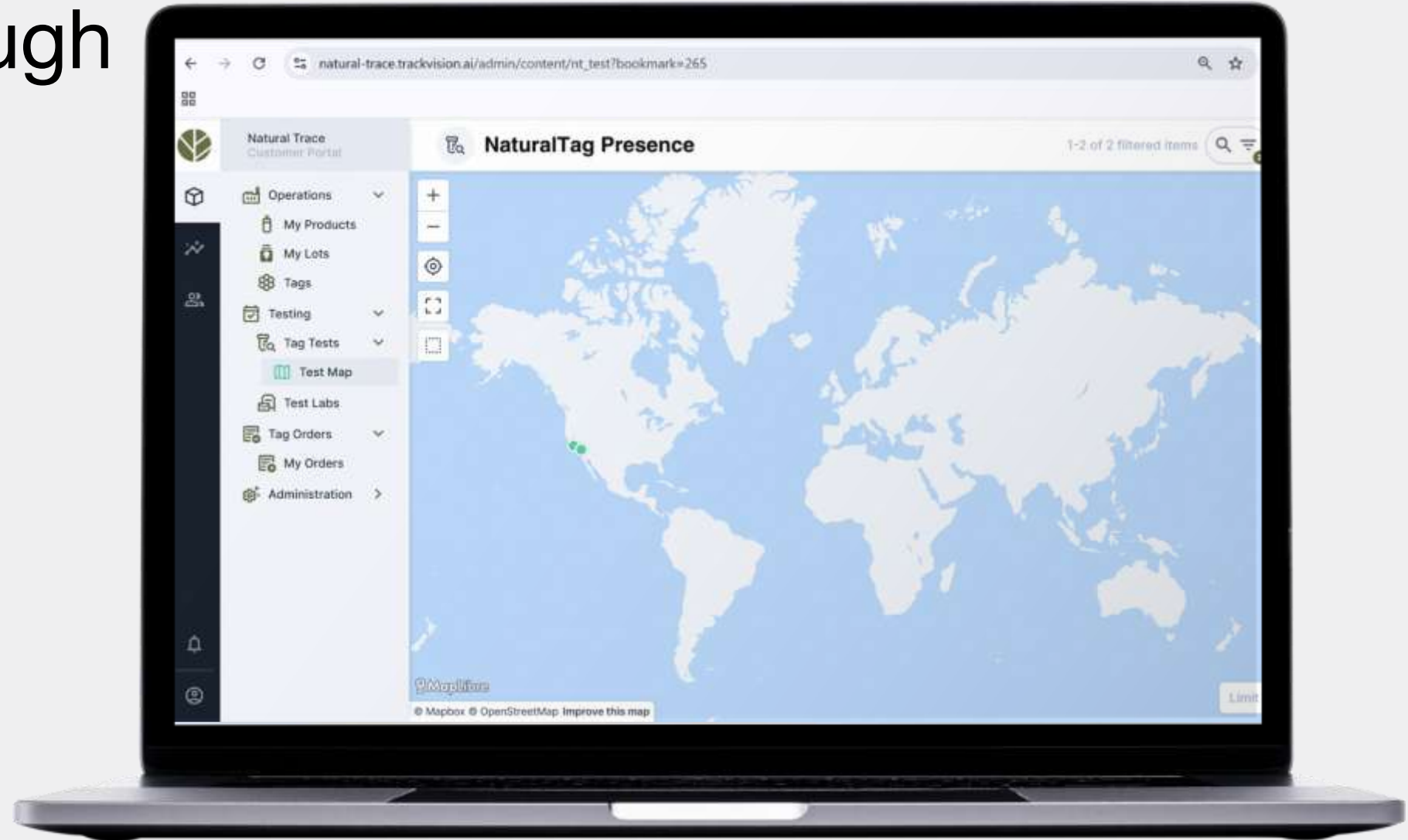


NATURALDETECT™

- Sensitive and accurate
- Robust results - adherence to ISO 22174
- Identifies product authenticity and dilution



Insights through NaturalCloud



3-Step Traceability Solution



NATURALTAG



Inactivated probiotics
100% natural, GMO-free
Low dosage
Zero sensory impact
Food safe



NATURALDETECT



PCR protocol
Parts-per-million (PPM)
detection
Sensitive & specific



NATURALCLOUD



Digital link
Surveillance mapping
Supply chain insights

Food Matrices



COFFEE



HONEY



FRUIT



NUTS



SEAFOOD

Ease of Detection

Stability



VINEGAR



NUTRACEUTICAL



ALCOHOL



EDIBLE OIL



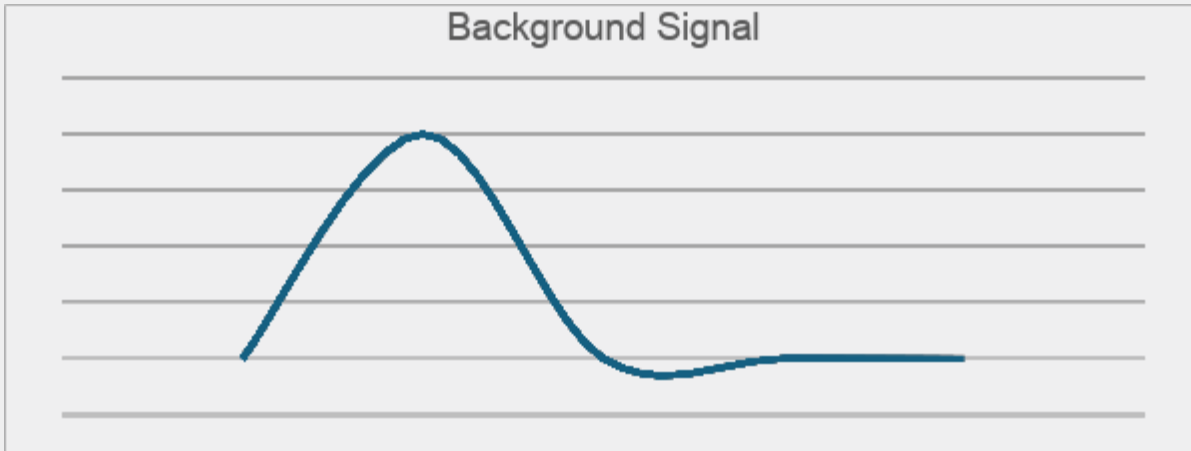
TOBACCO

NaturalTag Signature

Determining the Right DNA Signature

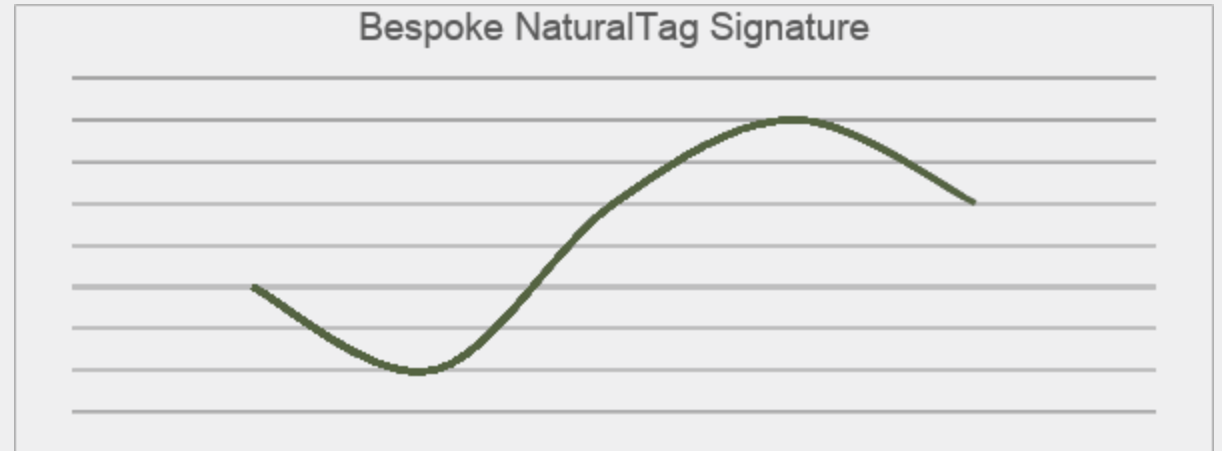
1) Determine background signal

Background Signal



2) Create bespoke NaturalTag signature

Bespoke NaturalTag Signature

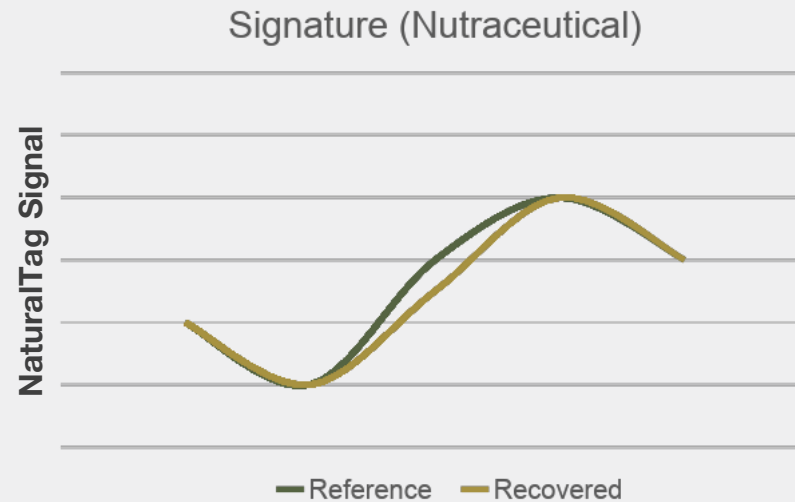
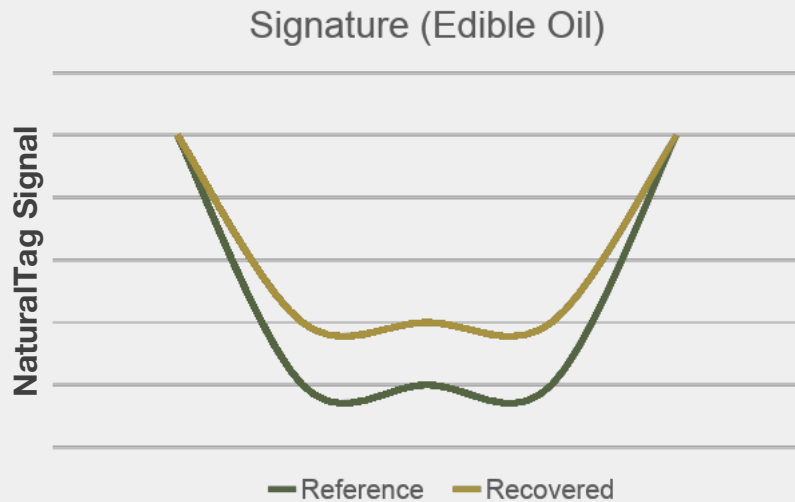


3) Validation, verification and deploy

- Determine tag amount and Limit of Detection
- Measure stability
- Optimise detection method

Validation

Recovery of NaturalTag – DNA profile

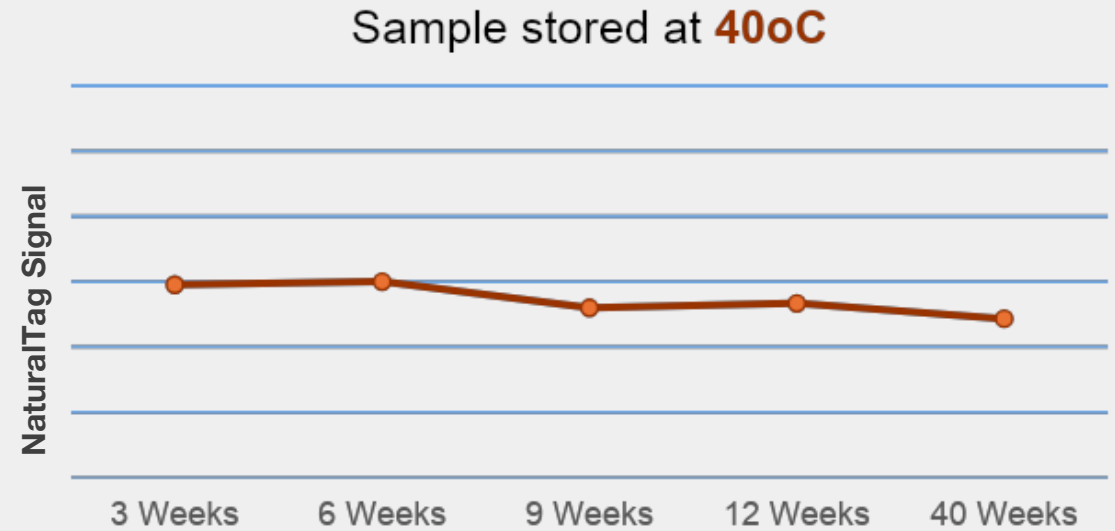
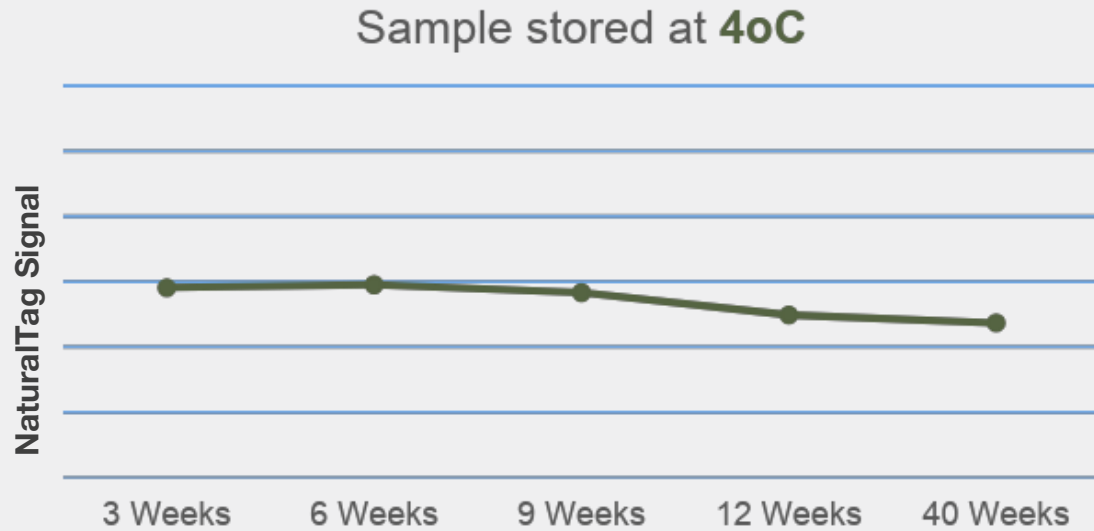


NaturalTag™ signature was **successfully recovered** in nutraceutical product manufactured and sold in market, with confirmation of profile.

NaturalTag™ signature is unique to each customer and was successfully recovered and confirmed through PCR.

Validation

Stability of NaturalTag (Dry Aging)

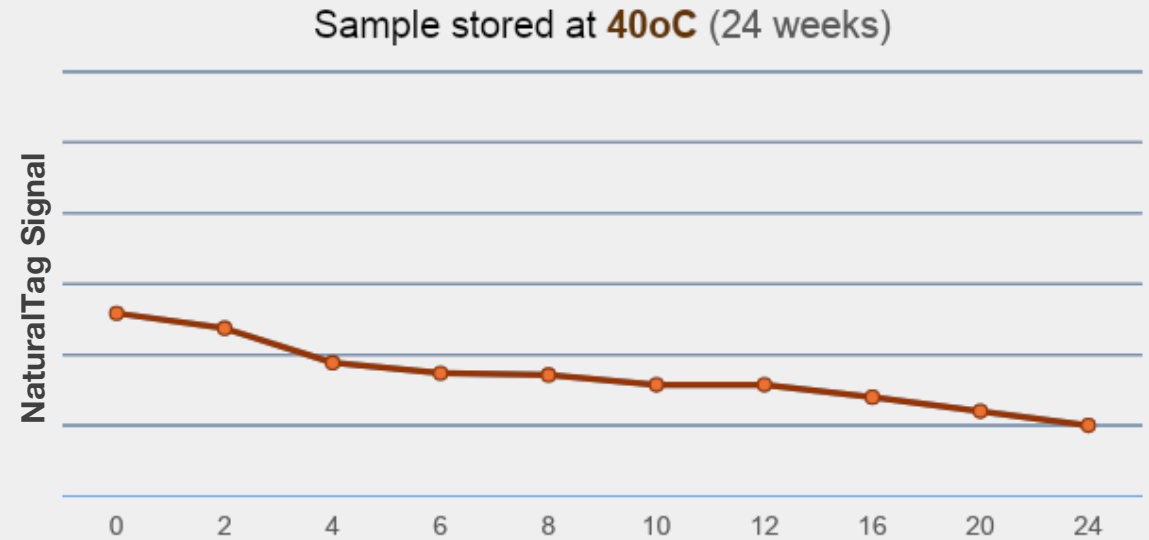
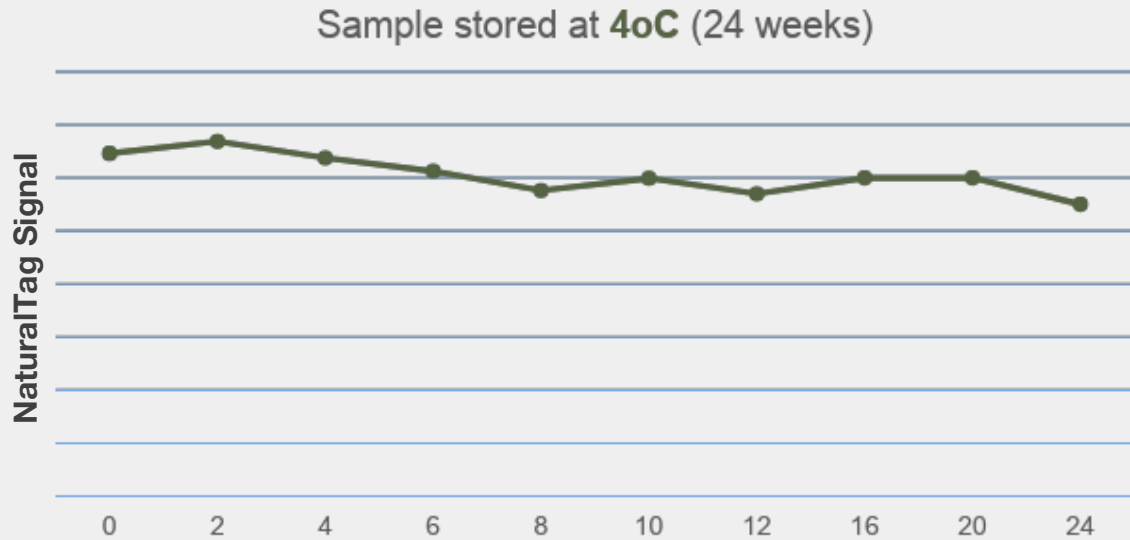


Study and analysis of NaturalTag™ showed minimal degradation and high level of stability across a duration of 40 weeks.

Samples are stored at 4°C to mimic a storage scenario in cold temperature and at 40°C to mimic an accelerated storage scenario where 1 week at 40°C storage equates to 1 month at room temperature, based off Q10 concept leveraging Arrhenius equation.

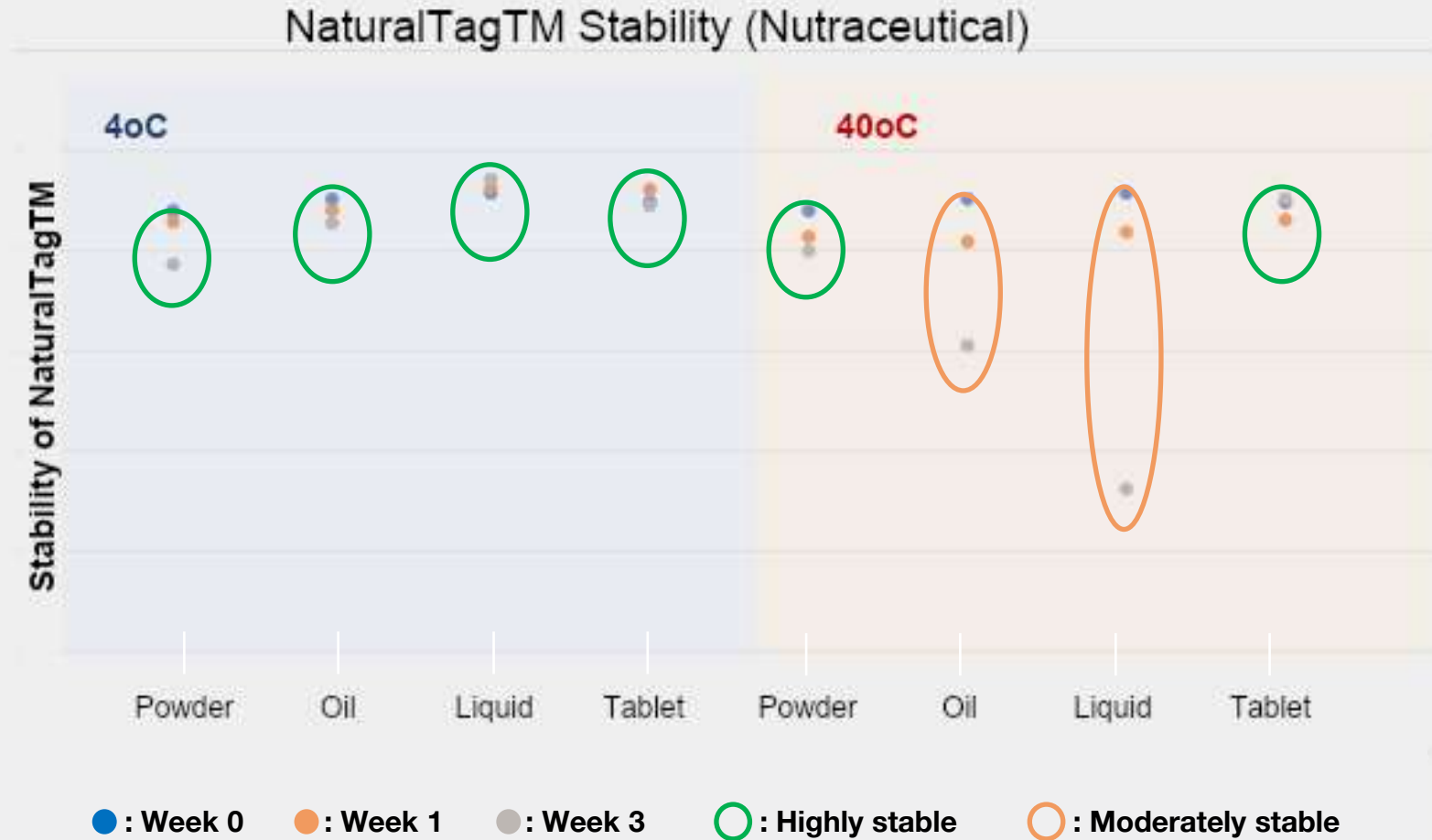
Validation

Stability of NaturalTag (Wet Aging)



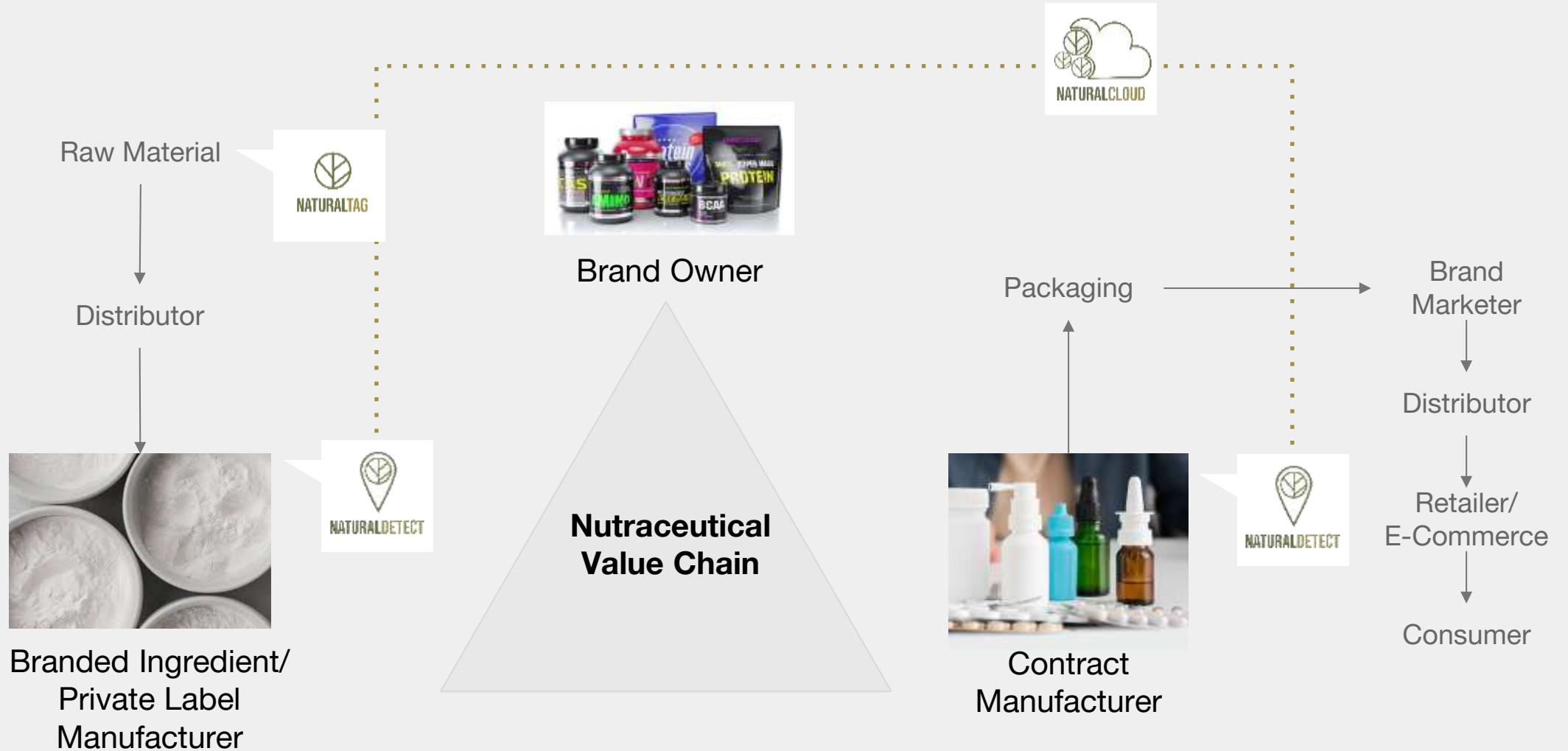
Samples are stored at 4°C to mimic a storage scenario in cold temperature and at 40°C to mimic an accelerated storage scenario where 1 week at 40°C storage equates to 1 month at room temperature, based off Q10 concept leveraging Arrhenius equation.

Stability Highlight - Nutraceutical



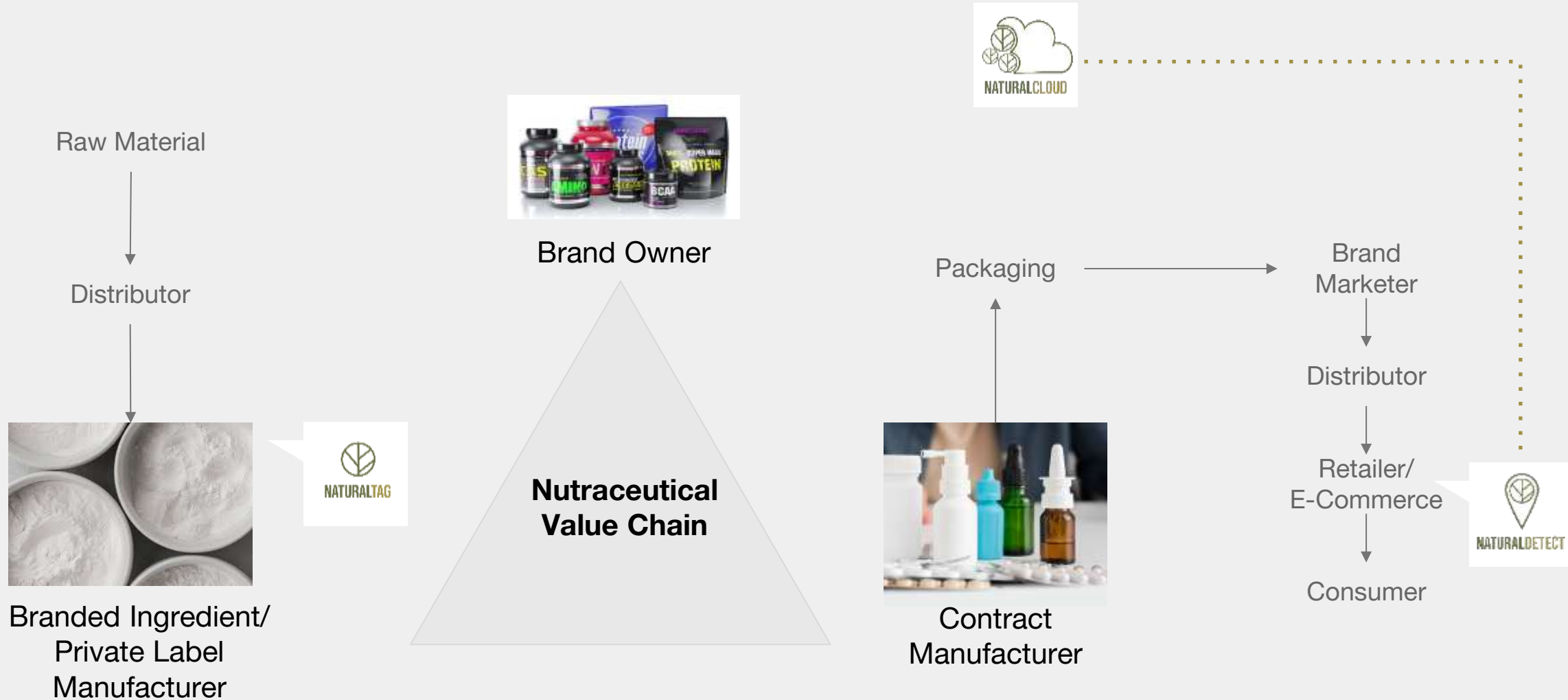
Supply Chain Traceability - Upstream

Traceability to source – determining where raw materials come from



Supply Chain Traceability - Downstream

Traceability to market – Ensuring supply chain integrity to consumer



Company Profile

- **Singapore** based company founded in June 2021
- **International team** with expertise in life sciences, food safety and bioinformatics
- **Partnerships** with Food Authenticity Network (UK) and National University of Singapore
- **Production site** ISO 22000- & ISO 45001-certified; Singapore Food Agency and FDA licensed facility



Runner-Up (Highly Commended)

Most Innovative Service, Technology or Digital Solution Supporting the Nutraceutical Industry



Winner

Most Innovative Service or Digital Solution Supporting the F&B Industry

Partners:



Finalist

2024 FoodTech 500



Taking Traceability To The Next Level



CL Goh
Co-Founder/ Executive Director



Dr. Chantal Roth
Co-Founder



Expertise in life sciences, food sciences, food safety and bioinformatics



Backed by food and food ingredients industry veterans with global operations, regulatory and legal expertise



Prof. Lukas Muller
Co-Founder



Dr. Julia Lee
Chief Executive Officer



Alrik Tan
Chief Scientific Officer



Kirsty Hall
Head of Marketing & Compliance



Michael Malone
Business Devt/ Europe



Dr. Alex Wild
Angel Investor



Anna Schmidt
Lab Intern



Dr. Elizabeth Lewis
Food Regulatory Advisor



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Contact Us

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A world where every great product comes with a trusted provenance story



Brand owners and manufacturers

Proof of value for high value products



Supply chain partners

Incorporate technology as an added level of traceability

