



Session	Start-ups/SMEs looking for Finance: pre-seed/angel/seed funding
Title	Natural Alternatives to Meat for the Masses
Company	Esencia Foods
Speaker	Hendrik Kaye
	Co-Founder and Managing Director
Keywords feedstock (max. 2)	#Legumes, #Mycelium
Keywords technology (max 2)	#Solid State Fermentation
Keywords End-Product (max 2)	#food #proteincomponent
Abstract:	
About us: Esencia Foods helps foodservice Chefs first and meat companies second to develop and launch true, natural alternatives to meat for the mass market with scaled mycelium solid state fermentation. Problem: We confront the escalating problem of a food system at the brink of exhaustion. Plant-based vegan alternatives have been a start to tackle this problem, but disappoint: 1 out of 3 consumers lacks #TEXTURE, every 2nd consumer them too #COSTLY, and 1 out of 3 consumers distrusts #LONG LABELS and ultra-processing. The underlying problem is technological: it is impossible to create true and good natural food with current protein powders processed with existing technology. Solution: We introduce a new component to the alternative protein industry by innovating the ancient process of mycelium solid state fermentation to produce alternative protein products (2 patents pending). By combining mycelium's texturization and bioprocessing capabilities, we build distinct bases for creating different fish and meat products with natural #TEXTURE at #LOWCOST and have #CLEAN LABELS. USPs: • Unique texture through creating a 3-dimensional biomass canvas (compare to protein powders) • Naturality with a handful of ingredients (compared to e.g. 23 ingredients of the Beyond Meat burger) • Price leadership at product cost <3 €/kg through solid state fermentation saving extensive food processing steps (cheaper than even chicken)	

- Flavouring advantage: No strong off-flavours and natural aromas combined with the ability to soak in aromas (compared to just applying from the outside)
- True fermentation platform technology (other than e.g. co-fermentation or precision fermentation) with meat and fish tested with customers
- Technofunctional advantages allowing clean labels and lower processing cost and is customizable for end products
- Incorporation of different food and side streams and adaptation of fermentation conditions (e.g. different hardnesses, gelling, binding etc.) proven
- Not Novel Foods and hence the only mycelium solid state fermentation company allowed to sell in the EU

Competition

Competition splits into three groups:

- (i) plant based startups building generation 0.1 alternative proteins,
- (ii) cell-based startups maybe reaching the market in 10-15y,
- (iii) mycelium startups, both liquid and solid state.

We differentiate by pursuing a true and proven mycelium solid state fermentation platform technology (unlike e.g. precision fermentation) that allows us to create biomass at lowest production cost through 100% conversion of inputs to outputs (unlike existing mycelium fermentation processes), and by pursuing a non Novel Foods route (which makes us one of four mycelium startups eligible to sell in the EU).

We see solid state fermentation superior to liquid state fermentation due to favourable economics and the possibility to create texture. Despite individual funding of €50-400M of leading Liquid State Fermentation startups, these players could not overcome technological barriers.

Technologically, core competitors are chunk foods (steak, Israel and US, Novel Foods), MyForest Foods (Bacon, focused on US, Novel Foods) and Millow Foods (Sweden, minced meat).

Scaling

We scaled our process to >200kg per cycle and have proven asset-light scaling through retrofitting mushroom farms and indoor farms.

Go to market

First, we turn our mycelium cake component into vegan alternatives for food service and hybrids; then expand channels and applications for b2b customers.

Customers and traction

We built our own industrial pilot plant. It is running in ramp-up phase and we pre-sold the Q1 production already.

Further,

1. Partnerships and LOIs: Secured Letters of Intent (LOIs) with various restaurants, gastronomic suppliers, and food companies worth >20M€. The most prominent names are COOP, the leading Swiss grocer and restaurant supplier, and REWE, the leading German grocer.
2. Testings and tastings: We served more than >4,000 samples to consumer, b2b customer, gastronomists.

3. Premiere: A restaurant sold our food the first dishes made from solid state fermented mycelium ever for 1 week.

Team

The team of 12 FTE has combined >40years in both startups and at food corporates, covering research to sales: We designed bioreactors, scaled fermentation processes, developed vegan products, introduced new-to-the-industry food manufacturing processes, ran pilot productions, built commercial relationships and worked in professional kitchens. Co-founders are Hendrik, ex leader of an FMCG unicorn, and Bruno, PhD in Biophysics and professional Chef.

Funding

We won the EIC Accelerator which gives us €2M non-dilutive funding. From this money, we built the pilot plant. We raise €1M to match the funding, launch and scale. Every Euro invested is leveraged with 3x public funding.