

# Steam vs. LEEB

Food safety opportunities  
of new technologies



**KÜNDIG**  
FOOD INGREDIENTS SUPPLIER





## Portrait

- Marc-Remo Kündig (1980)
- Represent the 3<sup>rd</sup> generation
- Swissvax           Product Manager / Partner  
Kaladent           Sales „new technologies“  
Kündig DE           MD  
Kündig Gruppe   Marketing & Communication
- CBDO Kündig Group & MD Kündig Germany





## Kündig Group

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„The Kündig Group is a 101 year old, family owned production and trading company with headquarters in Zurich/Switzerland”

## Our Mission:

- To continuously optimize the quality and safety of food and plant based pharmaceutical ingredients.
- Through the combination of 101 years of know-how and the cutting-edge technologies
- Dried vegetables, herbs, mushrooms  
phytopharmaka  
Cereals, pulses, oilseeds  
Frozen products



## Importance of Food Safety

- Microbial contamination in dry food is a major global challenge
- 1 in 10 people fall ill after eating contaminated food
- Children and seniors affected most
  
- Exposing food companies to:
  - expensive product recalls
  - damaged brand reputation
  - food waste





# BIOSTERIL

## NATURAL STEAM STERILIZATION

- Specialised in the gentle microbial reduction in foodstuffs and pharmaceutical raw goods.
- GMP-certified processes guarantee the highest degree of food safety and quality of conventional and organically grown produce
- Pioneer since 1994
- Using batch process // water & heat = referral to a „Natural Treatment“



A woman with dark hair, wearing a grey tank top, is leaning over a table, ironing a light blue shirt. She has a frustrated expression, with her mouth open as if shouting or complaining. She is holding a blue and white steam iron. The background is a bright, slightly blurred indoor setting.

**Steam**





## Natural & Highly Efficient

- Water and heat are highly efficient
- Label: „Natural Steam Sterilization“
- Difficulties on an operational level:
  - How much is too much?
  - Impact to taste, quality, nutritional value
  - Post treatment drying
- High cost due to batch process





## Pilot Project with LEEB

- In June 2017 we signed a contract with Bühler to test the LEEB technology
- Official technical partner during R&D
- A thorough look into a new „world“
- A game changer:  
no heat // no water// no chemicals //  
fast treatment // environmentally  
sustainable // easy & safe
- Clients were amazed - especially phyto-  
clients (Etherical Oils)





## Perception of Clients

„clouded picture“

- Positive perception of results and product quality – love the fact that treatment is cheaper, no haptic change, efficient
- Highest interest coming from Phyto Clients // “big” jobs // commodities
- Negative perception of catchword “irradiation”
- Negative perception of “label Requirement”
- Negative perception much stronger with our healthy driven & organic customers



## Conclusion

- Irradiation technology (in our case LEEB) is a big opportunity
- Ability to treat a product without heat and water / achieving top results
- Important: consumer trust
- Food Industry under the watch
- “What the health”, “hungry for change”, “GMO OMG” “, “rotten”, etc
- Label requirement = deal breaker





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