„Microwave-assisted drying of fruit foams and extraction of natural fruit aromas“

Background
- Nutritional value and sensory quality of dried fruits is currently unsatisfactory
- Current trend: All-natural fruit snacks
- High quality fruit snack with attractive structures and new sensory perception → by microwave assisted foam drying
- Concentrate of flavoring substances during drying → by use of condensate

Approach
- Targeted change of product structure by foaming and drying of fruit purees
- Production of sensory appealing and high-quality dried fruit foams, which lead to an intensive aroma perception ("aroma-flash") when consumed
- Additional extraction of natural fruit aromas of the condensate → Higher added value in comparison to conventional fruit drying → Aroma-texture relationship for targeted control of aroma release

Possible topics for student works
- Freeze and microwave-freeze drying of raspberries and raspberry foams for the production on healthy snacks
- Effects of process parameters during drying on valuable ingredients (e.g. anthocyanins, vitamin C)

Contact and current announcements
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