TechConnect Ventures

Sprint Challenge Brief:

Innovative Approaches to Sodium Reduction

BACKGROUND

Salt, specifically sodium chloride (NaCl), has been a part of human life for millennia. It has been used in religious ceremonies, as a trade commodity, and most importantly, as a preservative and flavor enhancer in food.

Within foods, sodium can appear as a component of an ingredient, such as in a leavening agent, or as an ingredient itself. For example, sodium bicarbonate is a common ingredient that contributes to the overall level of sodium in a baked snack while also playing an important functional role. Other leavening agents may also include sodium as well.

TechConnect's client, a global Fortune 500 food and beverage company, is interested in exploring innovative approaches and technologies which can significantly reduce sodium usage in and as a topping on baked snacks, with a target reduction of 50% or more. Potential pathways of interest include, but are not limited to:

- Ingredients which enhance consumer perception of saltiness:
  - New formats for existing ingredients
  - Novel new ingredients
- Leavening technologies:
  - New leavening agents with reduced amounts of sodium
  - Innovative processing technologies that reduce or eliminate the need for leavening agents
- Application innovations:
  - Novel ingredients or application technologies enabling
    - More consistent topping coverage
    - More precise control of topping application
    - Increased adhesion of topping
    - Reduced usage of sodium as a topping

While the client is aiming to reduce sodium in snacks by 50% or more, all approaches or technologies which provide reductions in sodium are of interest, especially where multiple approaches may be combined or where further reductions may be possible with additional development.

The client is primarily interested in those technologies that are commercially available or nearly so but will also consider earlier stage technologies, provided that a viable pathway to commercialization exists.

Approaches adapted from other industries are of interest if the technology proposed is or can be made food usage compliant. Approaches which incorporate potassium-based technologies or alberger salts are not of interest unless significant improvement in cost or performance can be demonstrated.

The goal of this sprint is to facilitate contact and interactions between the Sprint sponsor and commercial entities (including Start-ups) or technology developers or research organization/university in this space. Submissions from all viable subject matter experts are of interest including those from academia and commercial entities.

REQUIREMENTS

Solvers submitting an Entry are encouraged to highlight capabilities in their Submission that meet criteria including:

- Type of innovation:
  - Chemical:
    - Salt alternative
    - Salt enhancer
    - Leavening agent
    - Adhesion agent
  - Mechanical/Physical
  - Composite: chemical and mechanical/physical
- Current percentage reduction in sodium
- Anticipated future reduction in sodium, if any
- Suitability for:
  - Sweet snacks
  - Savory snacks
  - Other food products
- Unique or innovative aspects of the approach
- Sustainability
- Technical maturity

BUSINESS OPPORTUNITY FOR SOLVERS

All complete and eligible Entries will be included in an exclusive Innovation Opportunity Report that will be presented to our client. Solvers with well-matched capabilities may be contacted directly by either TechConnect Ventures or the client to discuss potential partnership opportunities, including – but not limited to – demonstrations, consulting, contract research, licensing, and more. Top-rated Entries may also be invited to register or participate in an upcoming TechConnect Ventures event or pitch program.

PARTICIPATION RULES & GUIDELINES

Solvers are encouraged to review the Rules and Guidelines provided on the Sprint page for details about participation, including submission criteria, eligibility information, and more.

QUESTIONS? Contact Executive Director, Nick Kacsandi at info@techconnectventures.com