Background

Humans frequently under consume important nutrients that are needed for healthy living. For example, zinc and vitamin C intake are linked with improved immune function, while calcium and vitamin D intake are associated with improved bone health, and omega-3 fatty acids are suggested to have anti-inflammatory effects.

Including these and other micronutrients in more food and beverage products could facilitate increased intake in individuals worldwide. However, in beverage products specifically, there are many technical and sensory challenges when including meaningful amounts of micronutrients and essential fatty acids. Often, in higher doses, many nutrients can have off-flavors and smells or affect the appearance or texture of a beverage.

For example, minerals such as potassium, iron, calcium, magnesium, zinc, and iodine can have off flavors/bitter taste, chalky texture, mouth-drying sensations, and discolored appearance. Essential fatty acids like omega-3's often result in oily mouthfeel, fishy taste, and poor solubility in water. This prevents the inclusion or limits the amount of the nutrient in the final product. We are looking for any solutions that address these challenges with micronutrients and essential fatty acids in beverages so we can provide individuals with access to more nutritious beverage options.

What we're looking for

We are looking for innovative solutions that can increase the concentrations of nutrients (potassium, iron, calcium, magnesium, zinc, iodine, and omega-3's) in powdered or liquid beverages, ensuring each 12oz serving delivers between 10% and 50% of the US daily value for each micronutrient or 10-25% of the Adequate Intake for adults, for omega-3's. Our goal is to achieve this nutrient fortification with minimal impact on the sensory properties of the final product, such as appearance, taste, texture, and smell. We are open to a variety of approaches, including physical, mechanical, chemical, enzymatic, or other methods and technologies.

Solutions of interest include:

- Microencapsulation
- Flavor maskers
- Emulsification

- Suspension

Our must-have requirements are:

- Use of GRAS-certified ingredients or FDA-approved additives at functional levels
- Safe for human consumption
- Stable until the end of shelf-life
- Applied using commercially available processes

Our nice-to-have requirements are:

- Solutions for natural and bioavailable nutrient sources.
- Stable at a pH <3.0
- Materials implementable at an acceptable cost, though not necessarily cost-equivalent to existing solutions

What's out of scope:

- Non-GRAS ingredients
- Animal studies
- Materials containing allergens
- Solutions that are unethical to source
- Solutions for which continuity of supply is difficult to maintain

Acceptable technology readiness levels (TRL): Levels 5-9

1. Basic principles observed
2. Concept development
3. Experimental proof of concept
4. Validated in lab conditions
5. Validated in relevant environment
6. Demonstrated in relevant environment
7. Regulatory approval
8. Product in production
9. Product in market

What we can offer you

Eligible partnership models:

- **Sponsored research**
- **Co-development**
- **Supply/purchase**
- **Licensing**

Benefits:

Sponsored Research

Funding is proposal-dependent, starting with a proof-of-concept, typically ranging from $25,000 to $100,000 for a six-month length project with the potential for expansion based on results and opportunities.

Expertise
We offer the expertise of our team of scientists for collaboration and guidance during the project's development.

Who we are

We are driving transformation at The Kraft Heinz Company, inspired by our Purpose, Let's Make Life Delicious. Consumers are at the center of everything we do. With 2021 net sales of approximately $26 billion, we are committed to growing our iconic and emerging food and beverage brands on a global scale. We leverage our scale and agility to unleash the full power of Kraft Heinz across a portfolio of six consumer-driven product platforms. As global citizens, we're dedicated to making a sustainable, ethical impact while helping feed the world in healthy, responsible ways. Learn more about our journey by visiting www.kraftheinzcompany.com or following us on LinkedIn and Twitter.

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