after six months of storage, could be even more promising. This research was performed as a part of the activities under Task 3.1.2 Ref. Spoke 3 OnFoods.

4.17.4. P.17.136 | Brazilian Views on Integrating Seaweed into Their Diet

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Background: Brazil has a fishing industry with the potential to expand to the development of seaweed consumption. The purpose of this study was to explore Brazilian consumers' perceptions regarding their understanding, receptiveness, and preferences for consuming seaweed.

Methods: A questionnaire was administered using the Google Forms® platform, comprising a total of 21 questions. Three sections were evaluated: the first addressed sociodemographic information, the second assessed general dietary habits, and the third collected data on perceptions and attitudes towards seaweed consumption. Data analysis was conducted using Microsoft Office Excel 365®, and the correlation of variables was performed through the Sankey diagram. This study received approval from the Research Ethics Committee of the State University of Campinas, under protocol number CAAE: 57422222.6.0000.5404.

Results: The study involved 369 adults (77.8% women; 21.9% men). 86.7% of participants have already tried seaweed, with 67.2% considering it a sustainable food source and 62.0% recognizing it as a rich source of nutrients. 64.5% responded affirmatively, that they knew seaweed. Among those who expressed interest, 65.9% said they liked trying new foods and 63.4% appreciated culinary diversity. Regarding the preferred place to consume seaweed, 72.9% indicated Asian cuisine. Finally, they would like to include seaweed, 53.9% chose snacks, 44.4% pasta, 38.9% fresh salads, 40.3% bread and 35.2% cookies.

Conclusions: Data indicated that Brazilian consumers are interested in including seaweed in their diet, which is promising for the development of job creation, income generation, and health promotion.

4.17.5. P.17.138 | Optimized Descriptive Profile as a New Tool to Assess Coffee Quality in Cerrado Terroir with Different Potassium Sources

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Background: This study focuses on the Optimized Descriptive Profile (ODP) combined to Specialty Coffee Association (SCA) scores by Q- graders to assess the sensory qualities of Arabica coffee grown in Brazilian Savannah and its reaction to different potassium sources.

Methods: Ten panelists pre-selected through a sequence of discriminative sensory tests, underwent a 12-hour training for coffee flavors and odors. The sensory attributes analyzed were adapted from the Brazilian coffee regulation, including beverage aroma, sweet aromas, powder fragrance, acidity, bitterness, body, astringency, residual bitterness, and residual flavor. The weak and strong references were presented with the samples of two cultivars (Catiguá and Araras) and three potassium sources (K_2SO_4, KCl, KNO_3).

Results: Sensory ratings for all coffee samples ranged from 4 to 6 on a 9-cm scale, with bitterness being the only attribute showing significant differences among treatments. The Arara cultivar with KCl had the lowest bitterness, while Catiguá with KCl was the most bitter. Arara exhibited more pronounced sweet aromas and body compared to Catiguá. Potassium source did not significantly affect sensory attributes, despite concerns about chloride ions. Principal Component Analysis with ODP and SCA scores revealed genetic as the main variation factor with SCA scores closer to Arara cultivar and K_2SO_4 and KCl more associated with flavor, acidity, balance, finishing and body. Catiguá was

less associated with SCA scores and more associated with sweet and residual odors. The two similar attributes between the two methods, acidity, and body, were positively associated. Residual bitterness and astringency were more related to Arara coffees with KNO3 and KCL fertilization, and both were close to positive SCA scores.

Conclusions: ODP was compplemmentary to SCA score to assess coffee quality. Genetic influenced quality more than potassium sources, in the conditions of Cerrado region, a novel location of Brazilian coffee production.

4.17.6. P.17.139 | Modelling of Sweetness Perception Based on Sensory Analysis as a New Tool for Sugar Reduction in Biscuits

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Background: Sucrose has a critical role in taste and technological properties of sweet bakery products. Due to the relationship between high sugar consumption and health issues, sugar reduction is prevalent in food industry. However, because of the unique characteristics provided by sucrose, sugar reduction is a great challenge in bakery products. This study aims to understand effects of various changes in the biscuit formulation on sweetness perception.

Methods: Biscuit recipe was modified by the replacement of 50% of the flour with whole wheat flour, protein enrichment, and addition of sweetness-related flavorings. Sensory analysis was performed by using line scale and untrained panelists to observe the changes in sweetness perception at different sucrose concentrations (6–39%). Then, the sugar ratio-sweetness perception data were explained by the modified Weibull Model. Volatile compounds were analyzed by SPME-GC-MS.

Results: Adding whole wheat flour, protein hydrolysates, and flavor compounds to biscuits increased perceived sweetness at certain sucrose concentrations. This change in sweetness may be associated with volatile components of biscuits due to recipe modifications. An increase in Maillard reaction and caramelization products, especially certain odor-active pyrazines, was noted in biscuits enriched with protein. Biscuits with whole wheat flour had an increase not only in Maillard and caramelization products but also in ferulic acid degradation products, which was related to composition of whole wheat flour. Elevation of volatile compounds associated with sweetness contributed to enhanced perceived sweetness in biscuits.

Conclusions: Whole wheat flour, protein hydrolysates, and flavorings are promising ingredients for sugar reduction in biscuits. The modified Weibull model which was used for the first time for the evaluation of sensory data, could be used for sugar reduction purposes in academia and industry to understand the sweetness perception-sugar ratio once the curve has been obtained.

4.17.7. P.17.140 | Ethical and Responsible Marketing Campaigns in the Brewing Industry: Exploring Their Effectiveness on At-Risk Consumer Targets—A Systematic Literature Review

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Background: In recent years, the rise in excessive alcohol consumption, coupled with the widespread adoption of riskier drinking patterns reported internationally, has underscored the growing need for initiatives aimed at educating about responsible drinking behaviors. In the alcohol industry landscape, the beer sector has increasingly emphasized marketing strategies to promote conscious consumption, adopting slogans, advertisements, commercials, and labeling aimed at discouraging inappropriate alcohol use. These initiatives primarily target vulnerable groups, including minors, pregnant women and drivers, recognizing their higher risk of adverse consequences from an excess of alcohol intake in the short and long term, both nutritionally and psychologically. The scientific