

INTEGRASI ANALISIS *CHOICE-BASED CONJOINT* (CBC) DAN UJI SENSORIS DALAM ANALISIS PREFERENSI KONSUMEN TERHADAP PRODUK YOGHURT KERING BEKU

INTISARI

Oleh:

EZRA JARED MULASIHOL NAIBAHO

22/497635/TP/13483

Yoghurt kering beku merupakan inovasi produk pangan fungsional yang dikembangkan untuk mengatasi keterbatasan yoghurt konvensional yaitu umur simpan pendek serta bergantung pada rantai dingin. Namun, penelitian yang menghubungkan atribut keputusan pembelian dengan persepsi sensoris aktual konsumen masih sangat terbatas. Penelitian ini mengintegrasikan metode analisis *Choice-Based Conjoint* (CBC) dengan uji sensoris *Napping*. Analisis CBC dilakukan terhadap 263 responden menggunakan model logit bersyarat dengan lima atribut (rasa, kandungan gula, kandungan probiotik, ukuran kemasan, dan harga). Sementara itu uji sensoris *Napping* dilakukan terhadap 81 panelis tidak terlatih yang mengevaluasi empat sampel yoghurt kering beku (PSPG, Casheli, Crunchie, dan Krisna) yang dianalisis dengan *Principal Component Analysis* (PCA) dan *Multiple Factor Analysis* (MFA). Hasil CBC menunjukkan kandungan probiotik sebagai atribut paling dominan (kepentingan relatif 45,34%), diikuti dengan kandungan gula (26,87%), harga (13,04%), rasa (12,39%), dan ukuran kemasan (2,35%), dengan nilai kesediaan membayar untuk taraf Tanpa Probiotik sebesar -Rp 76.478. Hasil PCA *Napping* menjelaskan 84,9% total variansi dengan PSPG terpisah jauh dan diasosiasikan dengan karakter asam, *fermented*, dan *milky*. Crunchie dan Krisna berdekatan dengan karakter renyah dan *fruity*; serta Casheli paling kuat diasosiasikan dengan deskripsi manis. Integrasi kedua metode mengungkapkan bahwa PSPG satu-satunya produk yang memenuhi atribut terpenting konsumen (probiotik), namun profil sensorisnya paling jauh dari preferensi konsumen yang menyukai karakter rasa *Mixed Fruits*, sehingga membuka peluang pengembangan produk yang mengoptimalkan keunggulan fungsional sekaligus profil sensoris.

Kata kunci: yoghurt kering beku, analisis konjoin, *napping*, *multiple factor analysis*, preferensi konsumen

INTEGRATION OF CHOICE-BASED CONJOINT (CBC) ANALYSIS AND SENSORY TESTING IN THE ANALYSIS OF CONSUMER PREFERENCES FOR FREEZE-DRIED YOGHURT PRODUCTS

ABSTRACT

By:

EZRA JARED MULASIHOL NAIBAHO

22/497635/TP/13483

Freeze-dried yoghurt is a functional food innovation that addresses the limitations of conventional yoghurt, specifically its short shelf life and reliance on the cold chain. However, research linking purchase decision attributes to consumers' actual sensory perceptions remains very limited. This study integrates the Choice-Based Conjoint (CBC) analysis method with the Napping sensory test. The CBC analysis was conducted on 263 respondents using a conditional logit model with five attributes (taste, sugar content, probiotic content, package size, and price). Meanwhile, the Napping sensory test was conducted on 81 untrained panelists who evaluated four freeze-dried yoghurt samples (PSPG, Casheli, Cruncgie, and Krisna), which were analyzed using Principal Component Analysis (PCA) and Multiple Factor Analysis (MFA). The CBC results indicated that probiotic content was the most dominant attribute (relative importance 45.42%), followed by sugar content (26.92%), price (13.07%), flavor (12.41%), and package size (2.19%), with a willingness-to-pay value for the "No Probiotics" level of -Rp 76,478. The PCA results explained 84.9% of the total variance, with PSPG clearly separated and associated with the characteristics of sour, fermented, and milky. Cruncgie and Krisna were closely associated with the characteristics of crispy and fruity, and Casheli was most strongly associated with the description of sweet. The integration of the two methods revealed that PSPG is the only product that meets consumers' most important attribute (probiotics), yet its sensory profile is the furthest from the preferences of consumers who prefer a mixed fruit flavor profile, thereby opening up opportunities for product development that optimizes both functional benefits and sensory profile.

Keywords: freeze-dried yoghurt, conjoint analysis, napping, multiple factor analysis, consumer preference.