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Effects of Processed Foods on Genome Stability

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Venue: Room 2 Polo di Chimica

ABSTRACT: Processed foods, characterized by high levels of preservatives, additives, refined sugars, unhealthy fats, and low nutrient content, have been linked to various health concerns, including the potential compromise of genome stability through mechanisms such as oxidative stress, nutrient deficiencies, exposure to genotoxic compounds, and inflammation. Genome stability is a hallmark of carcinogenesis and is essential for maintaining proper cellular function. The comet assay is a versatile method to detect DNA damage and DNA repair activity very useful for human dietary intervention trials. A diet focused on whole, nutrient-dense foods is crucial to supporting DNA integrity, repair mechanisms, and genomic stability.