Study on the volatile products from the Maillard reaction

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Abstract We compared the activity of a Maillard system at different temperatures and at the same pH. The identification of the volatile products was made in MS after a separation in GC. The conclusion was that, near the physiological pH, 7,5, the minimum thermodynamic and kinetic conditions are insured at 45°C. Over this temperature there are conditions for the apparition of mutagen and carcinogen products.

Keywords: Maillard reaction, β-alanine, glucose, volatile products