

**Title** Ascorbic acid degradation kinetics in tomatoes at different drying conditions  
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### **Abstract**

High temperatures and long drying times used in hot air drying can negatively affect the nutritional quality of the final product. It is generally observed that, if ascorbic acid is well retained, other components are also well retained. Hence, ascorbic acid can be taken as an index of nutrient quality of foods. The interest in dried tomato has increased since its use as ingredients for pizza and various vegetable and spicy dishes has become popular. Tomatoes are usually dried in slices or halves, after seeds and parenchyma removal with a resulting large amount of wastes and an important nutrient loss. The objective of this work was to investigate the effects of drying temperatures on ascorbic acid degradation kinetics in caustic-peeled whole tomatoes (with or without osmotic pre-treatment) and in halved and drained tomatoes. The degradation rates were dependent on samples treatment before drying, as well as on drying temperature. Lower degradation rates were observed in osmotically pre-treated whole tomatoes, whereas higher degradation rates occurred in halved tomatoes. Increasing drying temperature led to higher degradation rates.