

Nitrite

When direct addition of nitrite was approved for meats in 1925, it was believed that the sole function was for color development. However, within a few years scientific studies began to demonstrate the antimicrobial effects of this compound. Numerous studies now document the efficacy of nitrite in inhibiting growth and toxin production by *C. botulinum* in meat systems. However, studies also determined that there was little or no effect of nitrite on bacterial growth at or above neutral pH. In spite of large amounts of research, there is still not a complete understanding of how nitrite controls *C. botulinum* in meat products. Nevertheless, it is now recognized that nitrite inhibition is due to a combination of factors, not nitrite alone.