



Et Kalite Parametrelerinin Belirlenmesi

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1. Et Kalite Parametreleri

Et endüstrisi başta sığır eti olmak üzere tüketici talebinin yüksek olması nedeniyle önemi artan ekonomik bir sektördür. Etin besin değerinin yüksek olması ve beslenmede önemli bir protein kaynağı olmasının yanı sıra kolay bozulabilmesi ve kontaminasyon sonucu sağlık tehditlerine neden olması üretici ve tüketicilerin et güvenirliği konusundaki endişelerini artırmıştır. Tüketicilerin et kalitesine yönelik beklentileri sürekli olarak artmakta ve bu da kesim, et işleme ve dağıtım aşamalarında kalite kontrolünün gerekliliğini ortaya koymaktadır. Üreticiler açısından ise tüketici güvenliğini garanti altına almak için satışa sunulan tüm etlerin kalite kontrolden geçmesi gerekiği vurgulanmaktadır. Et endüstrisi, yüksek kaliteli et ürünlerini üretebilmek için üretim hattı boyunca güvenilir et kalitesi bilgilerine ihtiyaç duymaktadır (Monin, 1998; Damez ve Clerjon, 2008). Et kalitesi, başta demir olmak üzere proteinler, yağlar, lifler, vitaminler ve mineraller gibi besin içeriği ile ilgilidir. Diğer önemli etken ise kimyasal kalıntılar, ağır metaller, patojen mikroorganizmalar ve potansiyel sağlık tehlikesi oluşturan diğer maddeleri kapsayan güvenlidir. Ayrıca etin elde edildiği hayvanların biyolojik çeşitliliği ile ilişkili olan fonksiyonel özelliği de et kalitesini etkiler. Bununla birlikte et özelliklerini etkileyen faktörler kısmen cins, yaş ve cinsiyet ile ilişkilidir (Andrés ve ark., 2008; Kutsanedzie ve ark., 2019).

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otomasyon için temel teknoloji, gıda kalitesini değerlendirebilen ve insanlar tarafından yapılan aynı işlevi gerçekleştirebilen akıllı algılama sistemleridir. Tanımlanan tahrıbatsız tekniklerin çoğu, gelişime ihtiyaç duymakla birlikte, gıda endüstrisinde otomatik gıda kalitesi değerlendirmesinin temelinin bir parçası olabilecek potansiyele sahiptir. Pandemi şartlarının sektörü olumsuz etkilemesi sonucunda üreticilerin gıda üretimi sırasında insan temasını azaltacak tahrıbatsız test yöntemlerine olan talebi artmış ve bu konudaki araştırmalar hız kazanmıştır. Özette, et, balık ve bunların türev ürünlerinde meydana gelen çeşitli işleme proseslerinin ve kalite değişikliklerinin sürekli izlenmesi, tahrıbatsız teknikler kullanılarak etkin bir şekilde gerçekleştirilebilmektedir. Bu teknikler, yukarıda belirtilen zorluklar giderildiğinde, yalnızca geleneksel işleme süreçleri için değil, aynı zamanda genel olarak gıda endüstrisi için de değerli teknikler olarak kullanılacaktır.

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