BÖLÜM 2

PROBİYOTİKLERİN VE DİĞER GIDA SINIFI BAKTERİLERİN PÜSKÜRTMELİ KURUTMA YÖNTEMİ İLE MİKROKAPSÜLASYONU

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GİRİŞ

Probiyotikler, yeterli miktarlarda tüketildiklerinde konakçı sağlığında anlamlı yararlar sağlayan canlı mikroorganizmalar olarak tanımlanmaktadır (1,2). Son yıllarda, insan mikrobiyotası ve bağırsak florasının fonksiyonları hakkında artan bilgi birikimi, probiyotiklerin sağlık üzerindeki olumlu etkilerine olan ilgiyi daha da artırmıştır. Probiyotikler başlıca *Lactobacillus* ve *Bifidobacterium* cinslerine ait olup, bu mikroorganizmalar patojenleri baskılayan, bağışıklık sistemini modüle eden, bağırsak bariyer bütünlüğünü destekleyen ve konakçıda metabolik düzenlemelere katkıda bulunan çok yönlü işlevlere sahiptir (3,4). Sağlıklı bireylerde sindirim sisteminin iyileştirilmesi ve bağışıklığın desteklenmesi gibi genel yararların yanı sıra, inflamatuvar bağırsak hastalıklarının önlenmesinde, irritabl bağırsak sendromunun hafifletilmesinde veya antibiyotik kullanımına bağlı disbiyozun giderilmesinde de etkili olduklarına dair çok sayıda kanıt bulunmaktadır (5).

Gıda endüstrisinde probiyotiklerin kullanımı, yoğurt, kefir, peynir ve fermente içecekler gibi geleneksel süt ürünlerinin çok ötesine geçmiştir. Son yıllarda geliştirilen zenginleştirilmiş dondurmalar, sürülebilir peynirler, probiyotik yoğurt bazlı soslar ve bitkisel bazlı fermente içecekler, tüketicilerin fonksiyonel gıdalara olan ilgisinin artmasıyla birlikte yaygınlaşmıştır. Örneğin, *Lactobacillus rhamnosus* GG'nin yoğurt matrisine kapsüllü halde uygulanması, dört haftalık depolama

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yonel gıda ve yem pazarının yönünü belirleyecek başlıca unsurlar olarak görülmektedir.

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