

Bölüm 6

EGZERSİZ VE BDNF İLİŞKİSİ

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GİRİŞ

Yüzyıllar boyunca araştırmacılar, sağlıklı bir vücudun sağlıklı bir zihne yol açtığı ve bunun ardındaki mekanizmaları açıklamaya çalışmışlardır. İnsanoğlunun bedenini tanınması ve detaylarını öğrenmesiyle birlikte fiziksel aktivitelerin vücut üzerindeki etkileri de belirlenmeye başlanmış ve zamanla sağlık alanının da vazgeçilmez bir kavram olmuştur (Ağırbaş, Tatlısu ve Karakurt, 2021). Artık minimum egzersiz rutinlerinin bile beyin üzerinde gelişmiş hafıza, ruh hali, bilişsel işlevler, esneklik ve öğrenme yetenekleri gibi bir dizi güçlü etkiye sahip olduğu tespit edilmiştir (Phillips et al., 2014; Spalding et al., 2013). En önemlisi, egzersizin anti-depresan etkilere sahip olduğu ve alzheimer hastalığı veya daha farklı nörodejeneratif hastalıklar gibi yaşa bağlı zihinsel bozukluk ve atrofiye karşı koyduğu belirtilmiştir (Laurin et al., 2001). Bütün bunların yanı sıra fiziksel aktivite özgüven gibi psikolojik gelişimlere de sebep olmaktadır (Turan, Tatlısu ve Uçan, 2021). Ancak yakın zamana kadar egzersiz ve sağlık yararları arasındaki araçları tam olarak anlayamamıştır.

Geleneksel olarak fiziksel aktivite ile öğrenme ve hafıza oluşturma süreçlerinin bağımsız olduğu ve farklı organ sistemleri tarafından gerçekleştirildiği düşünülmüştür. Bununla birlikte, evrimsel bir bakış açısıyla, hayvan türlerinin hayatta kalmasını sağlamak için bu süreçlerin sıkı bir şekilde iç içe geçmesi gerekiyordu. Aslında, fiziksel çaba genellikle yakın bir tehlikeye yanıt olarak meydana gelmektedir. Bu tehlikeye karşılık vermek sadece koşmayı değil, aynı zamanda yeni stres kaynaklarına uyum sağlamak, tehlikelerden kaçınmayı veya bunlara daha iyi yanıt vermeyi öğrenmek ve çevreyi haritalamak ve yerlerini öğrenmek için artan esneklik yoluyla beynin daha iyi çalışmasını gerektirdi (Noakes and Spedding, 2012). Tüm bu tehlikelere karşı koyabilmek için gelişmiş bellek gerektirir.

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