

# BÖLÜM 5

## EGZERSİZDE HORMONAL DEĞİŞİMLER VE DÜZENLEME

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### Giriş

Vücutta iç ortam koşullarının dengede kalmasını sağlayacak çeşitli otonomik sistemler mevcuttur. Sinir sistemi ve endokrin sistem iç dengenin temininde görevi olan önemli iki sistemdir. Bu sistemler beraber fonksiyon görürler ve nöroendokrin sistem olarak da adlandırılırlar. Endokrin sistem kana hormon salgılayarak görev yaparken, sinir sistemi ise bilgi aktarımı için nörotransmitter adı verilen kimyasal maddeleri kullanır.

Homeostazisin sağlanmasındaki etkin rollerinden dolayı hormonlar; yıllardır spor bilimcilerin üzerine yoğunlaştığı konulardan biri haline gelmiştir. Egzersiz, insan vücudunda bazıları hormonal sistemde olmak üzere çeşitli değişimlere yol açabilir. Egzersiz sonucu görülen değişimler, bazı enzimatik ve hormonal uyumları da beraberinde getirmektedir. Bu bölümde egzersizlerin endokrin sistem üzerindeki etkileri ve yaşanan değişimler sunulacaktır.

### Endokrin Bezler ve Hormonlar

Endokrin sistem, çeşitli hormonlar salgılayan bezlerden meydana gelir. Hipotalamus, tiroid, paratiroid, adrenal bezler ve gonadlar egzersize uyumda en fazla önemi olan endokrin bezlerdir.

### Hipofiz Bezi ve Hormonları

Hipofiz bezi, beyin içinde hipotalamusun hemen altında yer almaktadır. Anterior ve posterior lob (sırayla adenohipofiz-nörohipofiz) olarak adlandırılan iki ayrı

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le beraber bilinen endokrin bezler dışındaki dokulardan kaynaklı yeni hormon benzeri maddeler de tanımlanmıştır. Bu bölümde egzersizlerin endokrin sistem üzerindeki etkileri ve yaşanan değişimler sunulmuştur. Bu bilgiler egzersiz programı planlamasında göz önünde bulundurulmalı ve ilerde yapılacak çalışmalarla da yeni veriler oluşturulmalıdır.

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