İnsan Beslenmesinde ve Bağırsak Sağlığında Bağırsak Florasının Rolü

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1. Giriş

Bağırsak mikrobiyomu üzerine yapılan çalışmaların artmasıyla birlikte, bağırsak mikrobiyomunun hayvan ve insan sağlığını koruyan en önemli faktörlerden biri olduğunu gösteren daha fazla veri ortaya çıkmıştır. Bağırsak mikrobiyomunun rolleri son derece çeşitlidir, ancak sindirim sürecine nasıl dahil olduğuna ve konakçı beslenmesine nasıl katkıda bulunduğuna çok dikkat edilmiştir (Laparra ve Sanz 2010). Konak ve onun mikrobiyomu arasında gerçekleşen dinamikleri ve bu etkileşimin spesifik sonucunun ne olacağını tam olarak anlamak için hala pek çok araştırma yapılmaktadır (Hillman ve ark. 2017). Bağırsak mikrobiyomu, gastrointestinal sistem içinde belirli bölgelerde yaşayan çok çeşitli bir mikrop ekosisteminden oluşur, ancak dış faktörlerden büyük ölçüde etkilenebilir, bu da bağırsak mikrobiyomunu çok değişken ve çeşitli hale getirir. İklim, kimyasallara, minerallere ve kirliliklere maruz kalma gibi çevresel faktörlerin dikkate alınması önemlidir, ancak konakçının tükettiği gıda, gastrointestinal sistemdeki mikroplarla doğrudan temasa geçerek, potansiyel olarak metabolizmalarını ve büyümelerini etkiler. Benzer nedenlerle, mikrobiyom, belirli alanlarda bulunacak mikrop grupları ve sayılarının ne olabileceği açısından bireyden bireye farklılık gösterebilir. Buna ek olarak, genetik gibi konakçıya özgü faktörler ve konakçı hücrelerle etkileşim ve bunların ne gibi bir etki yaratacağı gibi faktörler de bulunmaktadır.

Konağı ve mikrobiyomunu etkileyecek birçok değişkeni dikkate alırken, bağırsak mikrobiyotasında olması gereken mikroorganizmaların optimal oranları için evrensel bir standart bulmanın çok zor olduğunu ve bu sistemlerde sürekli olarak rol oynayan birçok dış ve iç faktörün hesaba katılması gerektiğini belirtmek önemlidir. Bununla birlikte, şimdiye kadar birikmiş olan toplu bilgi ile, sağlıklı bir bağırsak mikrobiyomunu teşvik etmek için genel kılavuzlar olarak kullanılabilecek belirli parametreler tanımlanmıştır. Bu yönergeler göz önünde bulundurularak, dengeli bir bağırsak mikrobiyomunun faydalarını ortaya çıkarmak için belirli kişiler tarafından belirli önlemler uygulamaya konulabilir (Hemarajata ve Versalovic 2013). Ayrıca, belirli mikrop gruplarının topluluk içinde sahip oldukları farklı rolleri anlamak; konakçıya fayda sağlama potansiyelleri ve sağlığa zararlı olabilecek bu mikropların etkisini nasıl azaltılacağı hakkında önemli bilgiler verir.

iyileşmeyecektir, buna soğuk algınlığı, grip (grip), bronşit, çoğu öksürük türü, bazı kulak enfeksiyonları, çoğu sinüs enfeksiyonları ve mide gribi de dahildir (Yoon ve Yoon 2018). Antibiyotiklerin ne zaman, hangi yaşta, ne sıklıkta, ne dozajda ve hangi hastalıklar için kullanılması gerektiğinin farkında olmak önemlidir.

10 Sonuç

Bağırsak mikrobiyomunun beslenmeyi iyileştirmede ve konakçının sağlığını geliştirmede oynadığı rol çok yönlü ve karmaşıktır. Yıllar boyunca, egzersiz, stresin azaltılması, daha iyi bir diyet ve belirli bileşiklerin tüketimi gibi birçok alışkanlık, daha sağlıklı yaşam tarzlarının destekleyicileri olmakla ilişkilendirilmiştir. Ancak mikrobiyomun konakçı ile nasıl etkileşime girdiğinin daha iyi anlaşılmasıyla, bu uygulamaların insan bağırsağında yaşayan mikrobiyal popülasyonu doğrudan nasıl etkileyebileceği hakkında daha fazla bilgi keşfedilmiştir. Bu eylemlerden elde edilen faydaların çoğu, mikrobiyotadan doğrudan yanıt olarak ortaya çıkar. Ancak, bu süreçlerin çoğunun uzun vadeli etkilerini anlamak için hala çok fazla araştırmaya ihtiyaç olduğunu belirtmek önemlidir. Mikrobiyom içinde bir denge olması gerekir ve araştırmalar, bağırsaktaki herhangi bir bakteri grubunun aşırı bolluğunun, bağırsak mikrobiyomunun faydalarından yararlanmak için yapılan her türlü çabayı boşa çıkaran disbiyoza yol açabileceğini göstermiştir. Aynı doğrultuda, bu faydaların çoğunun, belirli mikrobiyal profillere ve diğer dış faktörlere bağlı olarak kişiden kişiye değişeceğini belirtmek önemlidir. Bazı bireylerin sağlıklarını iyileştirmek için özel ihtiyaçları olabilir veya farklı bir yaklaşım gerektirecek bir durumda olabilir. Daha fazla araştırma, konakçı için daha iyi bir sonuç elde etmek üzere bağırsak mikrobiyomunu korumak ve etkilemek amacı ile daha iyi yönlendirilmiş uygulamaların geliştirilmesine yardımcı olacaktır, ancak şu anda kesinlikle yararlı olduğu kanıtlanmış ve bireylerin günlük yaşamlarında uygulanabilecek birçok önlem vardır.

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