Benign Anorektal Cerrahi Hastalıklarda Beslenme

Dr Mustafa U Kalaycı

Sunum planı

-Anorektal benign hastalıklarda anemnezde beslenme desteği

-Kalın barsak florasındaki beslenme nedenli değişikliklerin kolorektal ve genel etkileri

-Disbiosis ve Dışkı kalitesi

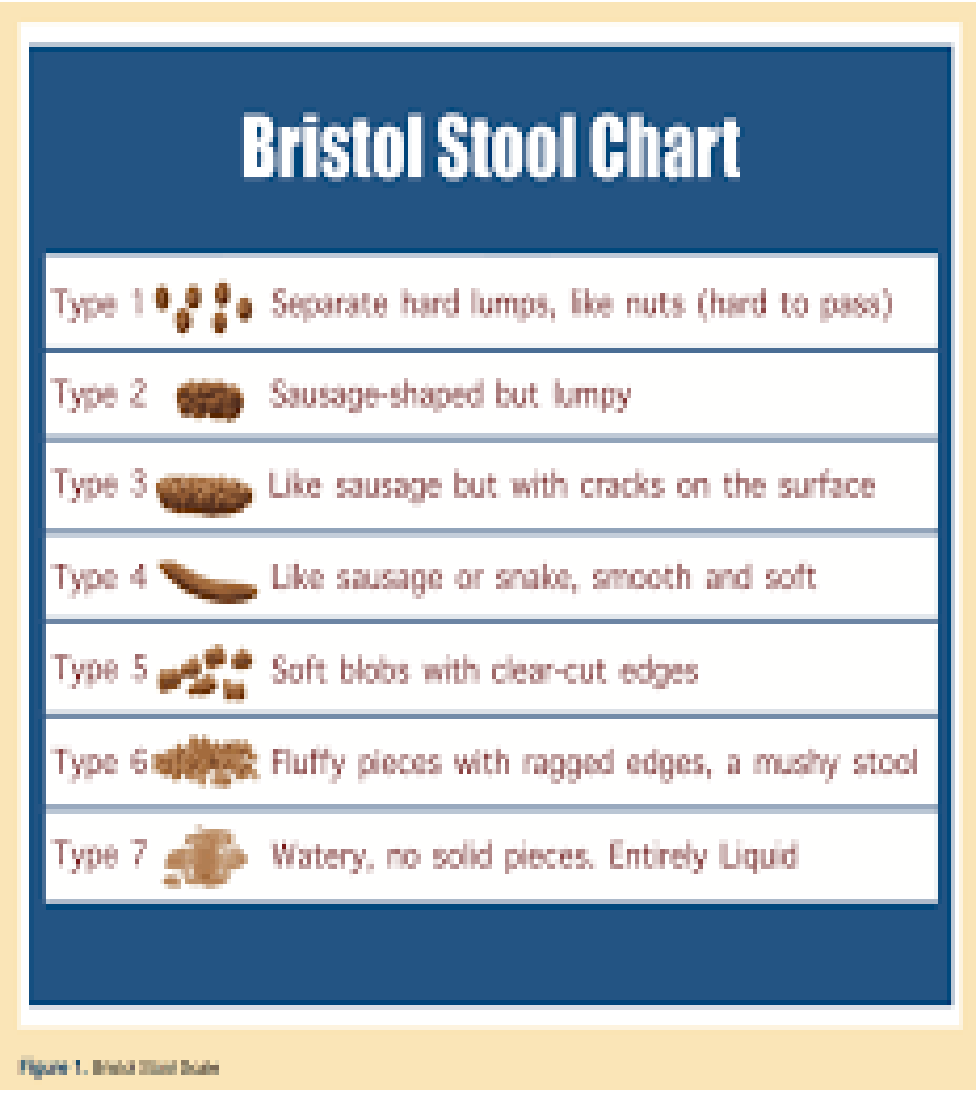
-Beslenme faktörleri ile ilgili öneriler

Dışkılama kalitesi

Milyon taşı

- Kolorektal hastalıklarda
- Semptomatoloji
- Tedavi
- Sonuçlar ve takipte
- Beslenme gerçeğinin göstergesi

Dışkı kalitesi ve farkındalık



- Barsak hareketleri,
- Beslenme
- Besin ögeleri konsantrasyonları,
- Sıvı alımı,
- Dışkılama güçlüğü
- Açısından değerli bir indikatör

Semptomatoloji ve tedavi yaklaşımında hedefler

Semptomatoloji tedavi hedefinin ana kısmını oluşturur.

Perm J 2016 Fall;20(4):15-222

Gerçek patoloji ?

Benign anorektal hastalıklarda semptomatoloji değerlendirmesinde

Nutrisyon Anemnezi

- Semptomatoloji tedavisinin gerisinde kalmaktadır
- Akut hadise sonrası kopukluklar göz ardı edilmesine sebep olmaktadır
- İlerlemiş hastalık, yetersiz tedavi, farklı patolojilerin sebebinin belirlenmesindeki etkisi göz ardı edilmektedir

Sorgulama; Dışkılama ve dışkı kalitesinin farkındalık

- Hastanın alım özelliklerinin farkındalık
- Yaşlılık, davranış bozuklukları gibi faktörlerin dikkate alınması
- Antibiyotik kullanımı, süresi
- Oral alım bozuklukları,
- Beslenme hataları,
- Yetersiz beslenme faktörleri ,diş patolojileride dahil
- Hastanın farkındalığının değerlendirilmesi
- Alım düzeni besin konsantrasyonları, içerik, pişirme gibi faktörlerin değerlendirilmesi

Nutrisyonun önemi

Kolonik fizyoloji ve disbiosis

- Diyet değişikliklerinde 21 güncz flora mukoazal kalınlık butirat sentezi ilintili barsak değişikliklerie sebebp olabilir
-
- It has
- been reported that longer treatments of diet-induced dysbiosis (5 and 13 weeks for LFD and HFD,
- respectively) eventually causes physiological changes such as obesity and constipation

- Mol. Gastroenterol. Hepatol. 2016, 2, 328–339
- BMC Complement. Altern. Med. 2010, 10, 68.

Beslenme tipi kolonik mikrobiom ve değişim

genes

MDPI

Article

Genes and Gut Bacteria Involved in Luminal Butyrate Reduction Caused by Diet and Loperamide

Nakwon Hwang [1], Taekil Eom [2], Sachin K. Gupta [1], Seong-Yeop Jeong [3], Do-Youn Jeong [3], Yong Sung Kim [4], Ji-Hoon Lee [5], Michael J. Sadowsky [6,7,8] and Tatsuya Unno [1,2,*]

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Abstract: Unbalanced dietary habits and gut dysmotility are causative factors in metabolic and functional gut disorders, including obesity, diabetes, and constipation. Reduction in luminal butyrate synthesis is known to be associated with gut dysbioses, and studies have suggested that restoring butyrate formation in the colon may improve gut health. In contrast, shifts in different types of gut microbiota may inhibit luminal butyrate synthesis, requiring different treatments to restore colonic bacterial butyrate synthesis. We investigated the influence of high-fat diets (HFD) and low-fiber diets (LFD), and loperamide (LPM) administration, on key bacteria and genes involved in reduction of butyrate synthesis in mice. MiSeq-based microbiota analysis and HiSeq-based differential gene analysis indicated that different types of bacteria and genes were involved in butyrate metabolism in each treatment. Dietary modulation depleted butyrate kinase and phosphate butyryl transferase by decreasing members of the Bacteroidales and *Parabacteroides*. The HFD also depleted genes involved in succinate synthesis by decreasing *Lactobacillus*. The LFD and LPM treatments depleted genes involved in crotonoyl-CoA synthesis by decreasing *Roseburia* and *Oscillibacter*. Taken together, our results suggest that different types of bacteria and genes were involved in gut dysbiosis, and that selected treatments may be needed depending on the cause of gut dysfunction.

Keywords: butyrate synthesis; gut microbiota; gut dysbiosis; metagenomics; mucin

- Shifting of gut microbiota by diet usually takes no longer than a week [31],
- and we also observed a significant gut microbiota shift at day 7 ($p < 0.001$), which was maintained
- for two additional weeks (Figure S6). Therefore, the three weeks was more than adequate to capture
- microbial shifts caused by the diets
- The chief complaint and history of the
- present illness are the first pieces of the
- puzzle to put together to reach the correct
- diagnosis.

- Unbalanced dietary habits and gut dysmotility are causative factors in metabolic and
- functional gut disorders, including obesity, diabetes, and constipation. Reduction in luminal butyrate
- synthesis is known to be associated with gut dysbioses, and studies have suggested that restoring
- butyrate formation in the colon may improve gut health. In contrast, shifts in different types of gut
- microbiota may inhibit luminal butyrate synthesis, requiring different treatments to restore colonic
- bacterial butyrate synthesis
- Genes **2017, 8, 350; doi:10.3390/genes8120350**
- **Barsak kalınlığı**
- **Barsakta kalan bakterinin sayı ve durumlarındaki değişiklikler**

Diet-induced gut dysbiosis has been reported to

- increase the abundances of Mucispirillum, Parabacteroides, Oscillospira, and Anaerotruncus. Mucispirillum
- colonizes mucosal layers in rodents, and is associated with gut infla

- Previous studies have reported that these three treatments
- yüksek yağ düzeyli
- Az fiberli
- (HFD, LFD, and LPM) shift gut
- microbiota and decrease concentrations of luminal butyrate [10–12]. Restoration of butyrate synthesis

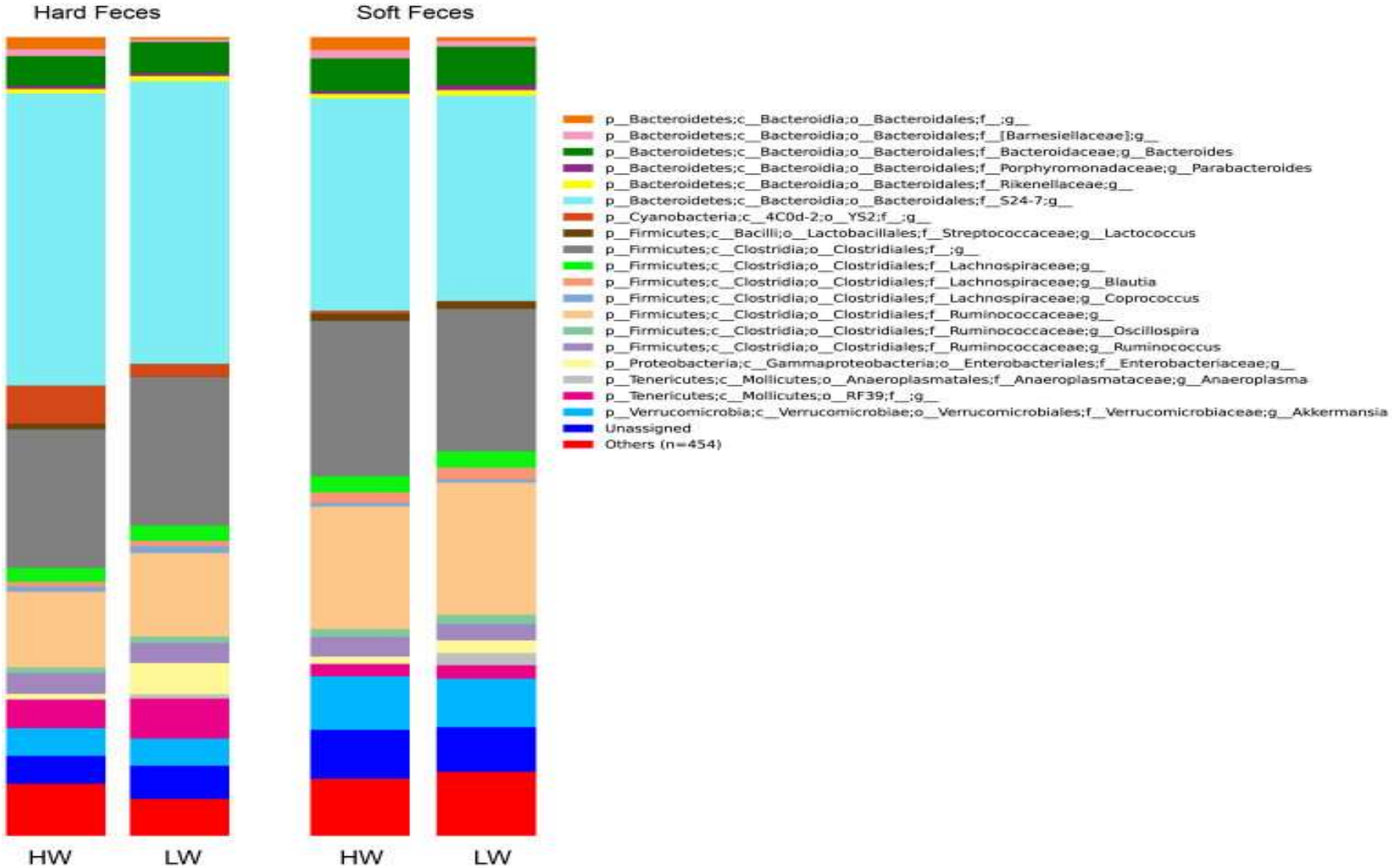
Beslenme nedenli Kolonik disbiosis etkileri

- barsak beslenmesi ve beslenme defekti ayrıca kolon hastalıklarına hazırlayıcı faktrleride etkilemektedir

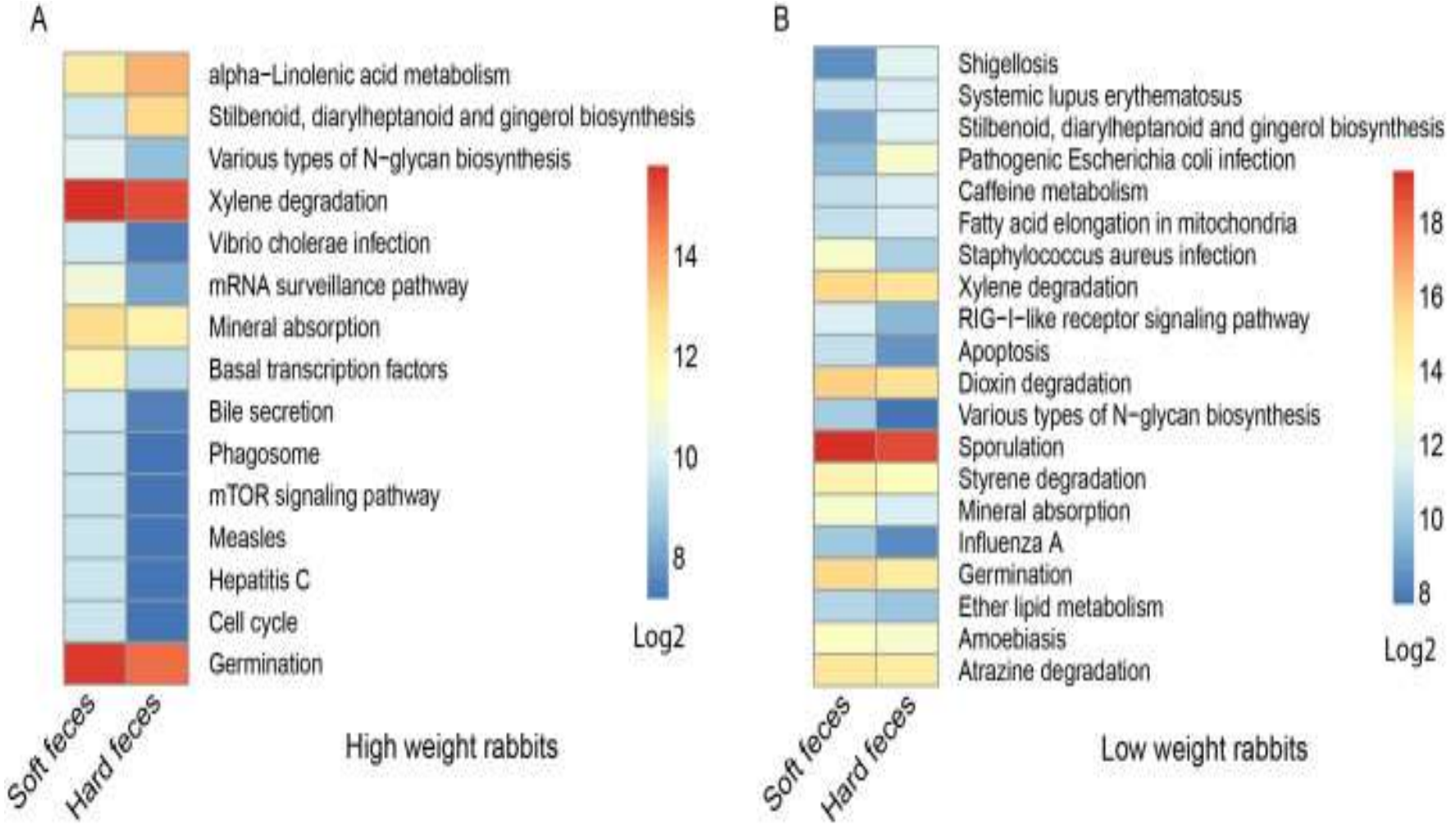
- high-fat diets (HFD) and low-fiber diets (LFD
- The HFD treatment also
- increased the relative abundance of Lactococcus, a known probiotic species [37]. In contrast, many obes people are colonized with Lactococcus [38], suggesting that probiotic effects of Lactococcus are host, orbacterial species- or strain-specific. These Lactococcus species with aldehyde-alcohol dehydrogenase
- gene adhE are known to convert substrates into alcohol rather than lactate [39
- Carlsson, M.; Gustafson, Y.; Haglin, L.; Eriksson, S. The feasibility of serving liquid yoghurt supplemented
- with probiotic bacteria, lactobacillus rhamnosus LB 21, and Lactococcus lactis L1A—A pilot study among
- old people with dementia in a residential care facility. J. Nutr. Health Aging 2009, 13, 813–819. [CrossRef]
- [PubMed]
- 38. Million, M.; Maraninchi, M.; Henry, M.; Armougom, F.; Richet, H.; Carrieri, P.; Valero, R.; Raccah, D.;
- Vialettes, B.; Raoult, D. Obesity-associated gut microbiota is enriched in Lactobacillus reuteri and depleted
- in Bifidobacterium animalis and Methanobrevibacter smithii. Int. J. Obes. 2012, 36, 817–825.
- HFD yoluyla butyrat sentez inhibisyonu
- observed significant loss of Lactobacillus in HFD samples, and taxonomic
- classification of contigs indicated the depletion of gabD is mainly due to the loss of Lactobacillus
- resulting in decreased synthesis of butyrate from succinate.
- Moreover, HFD decreased the
- *Genes* ***2017, 8, 350; doi:10.3390/genes8120350***

- abundance of the butyrate producers Parabacteroides and Bacteroides (in the Bacteroidales) that containthe buk and ptb genes ▪

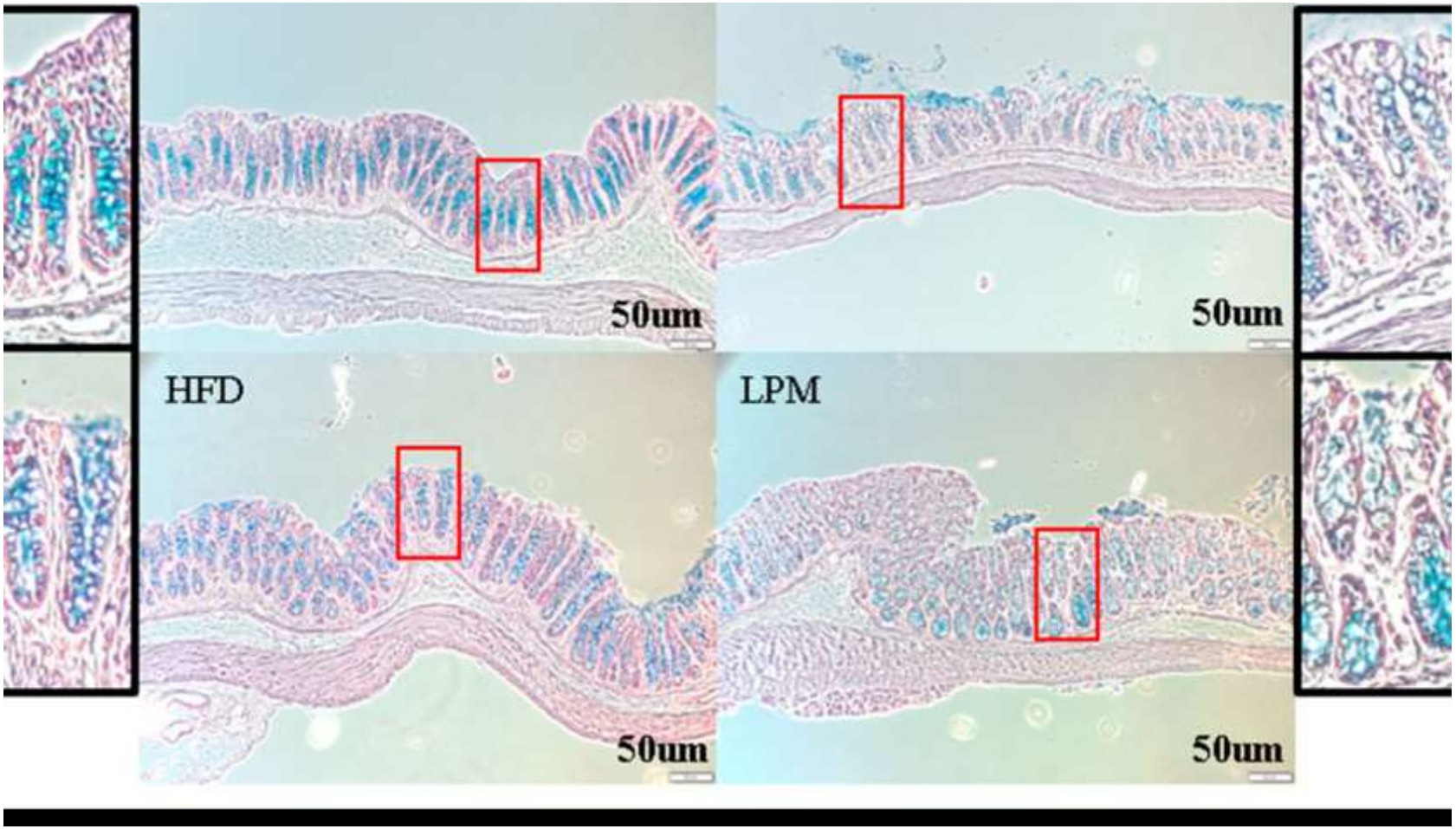
Dışkı sertliği ve bakteriyel içerik ile ilişkisi



Dışkı sertliği ve kilo faktörünün fizyolojik farklılıklardaki etkisi



Beslenme tipi ve barsak duvar kalınlığının ilişkisi



- A decrease in Anaeroplasma has been reported to be associated with fecal hardness
- Zeng, B.; Han, S.; Wang, P.; Wen, B.; Jian, W.; Guo, W.; Yu, Z.; Du, D.; Fu, X.; Kong, F.; et al. The bacterial
- communities associated with fecal types and body weight of rex rabbits. Sci. Rep. 2015, 5, 9342. [47] and diet-induced obesity [48],

- The decrease in the mucosal
- thickness induced by the loss of luminal butyrate may have allowed the increase of Sutterella and
- Erysipelotrichaceae, since they colonize epithelial cells. A decrease in Anaeroplasma has been reported
- to be associated with fecal hardness
- Zeng, B.; Han, S.; Wang, P.; Wen, B.; Jian, W.; Guo, W.; Yu, Z.; Du, D.; Fu, X.; Kong, F.; et al. The bacterial
- communities associated with fecal types and body weight of rex rabbits. Sci. Rep. 2015, 5, 9342. [47] and diet-induced obesity [48],

- In many patients there is an overlap, because colonic transit is delayed
- in two thirds of patients with difficult defecation.1,2

İltahabi barsak hastalıklarında nutrisyon

- Constipation is associated with increased psychologic distress. Several studies have
- shown higher prevalence for anxiety, depression, obsessive compulsiveness, psychoticism,
- and somatization.21,22 Furthermore, paranoid ideation and hostility subscores
- were higher in patients with dyssynergia than slow transit constipation or healthy controls,
- providing evidence for significant psychologic distress, more so in dyssynergics
- than slow transit constipation patients.22
- Sexual abuse was reported by 22% to 48% of subjects, mostly women, whereas
- physical abuse was reported by 31% to 74% of constipated subjects.11,23 Another
- study found greater incidence of sexual abuse in women with pelvic floor dyssynergia.
- 23Excessive straining to expel hard stools over timemay also lead to dyssynergic

  defecation.

- Rao SS, Seaton K, Miller MJ, et al. Psychological profiles and quality of life differ
- between patients with dyssynergia and those with slow transit constipation.
- J Psychosom Res 2007;63(4):441–9.
- 23. Leroi AM, Berkelmans I, Denis P, et al. Anismus as a marker of sexual abuse: consequences of abuse on anorectal motility. Dig Dis Sci

- Fiber supplements
- Organic polymers, such as bran or psyllium, have the ability to hold extra water and
- often resist digestion and absorption in the upper gut. There is no evidence that
- constipated patients in general consume less fiber than nonconstipated patients,
- however, and studies show similar levels of fiber intake.49,52 Furthermore,

- make a recommendation for the synthetic polysaccharide methylcellulose, or calcium
- polycarbophil or bran in patients with constipation.
- Brandt LJ, Prather CM, Quigley EM, et al. Systematic review on the management
- of chronic constipation in North America. Am J Gastroenterol 2005;100(Suppl 1):
- S5–21.
- 55. Ramkumar D, Rao SSC. Efficacy and

Sıvı alımı

- Diüretik etkili gıda maddelerinin kullanımına dikkat edilmelidir
- Kahve , çay kafein içerikli meşrubatlar
- Günlük devinim içerisinde sıvı ihtiyacı gözetilmeli programlı tüketim planlanmalıdır

Nutrisyonda fiber desteği üzerine öneriler

- Depressif davranış bozukluğu olan olgularda boşaltma kusuru fazlalığı, eşlik eden anorektal hastalıkların fazlalığı dikkate alınarak tedavinin bir parçası olarak dikkate alınabilir

ORIGINAL ARTICLE

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Psychometry and Pescatori projective test in coloproctological patients

Ana Célia Caetano[a,b,c], Dinis Oliveira[a], Zaida Gomes[d], Edgar Mesquita[e], Carla Rolanda[a,b,c]

Braga Hospital; University of Minho, Braga, Portugal

Conclusion Proctological patients had higher scores of depression, anxiety and stress and lower scores in the Pescatori projective test compared to healthy controls.

Fiber desteği

- Kronik kabızlıkta istatistiki olarak fiber desteği boşalma sayısını anlamlı oranda artırdığı gösterilmiş,
- Ağrılı dışkılama, rahat dışkılama alışkanlıkları üzerinde üzerine istatistiki olmayan ama almayan gruba göre daha iyi sonuçları sağladığı gösterilmiş

World Journal of Gastroenterology

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wjg@wjgnet.com
doi:10.3748/wjg.v18.i48.7378

World J Gastroenterol 2012 December 28; 18(48): 7378-7383
ISSN 1007-9327 (print) ISSN 2219-2840 (online)

META-ANALYSIS

Effect of dietary fiber on constipation: A meta analysis

CONCLUSION: Dietary fiber intake can obviously increase stool frequency in patients with constipation. It does not obviously improve stool consistency, treatment success, laxative use and painful defecation.

Fiberli nutrisyonel desteğin olumlu etkileri

My daily fiber intake goal	25-40 g daily
The US Department of Agriculture and US Department of Health and Human Services recommend that I eat 25 g to 40 g of fiber DAILY	1. Adequate fiber will regulate my bowel movements by a. softening hard stool and reducing the frequency of constipation b. adding bulk to loose stool and reducing the frequency of diarrhea. 2. Adequate fiber will improve my anal problems and bleeding by a. softening hard stool and making bowel movements less traumatic b. thickening loose stool and making bowel movements less traumatic. 3. Adequate fiber will reduce my risk of developing a. colon and rectal cancer b. diverticulosis c. complications of diverticulitis: Perforation, infection, emergency surgery. 4. Adequate fiber will reduce my cholesterol

How much fiber is in the food I eat?	1. The fiber content in foods that you eat can be found on the "Nutrition Facts" label for processed foods. 2. For fresh foods, fruits, and vegetables, there are a variety of Web sites that can give you the amount of fiber per serving. For example: www.NationalFiberCouncil.org; search for "fiber counter."
Go slow and keep it up	*Gradually* work your way up to taking 20 g of fiber daily in the form of a fiber supplement AND increase fiber in your diet so that you are eating at least 10 g to 20 g of dietary fiber daily. **Fiber supplement[2]: 20 g daily** **Dietary fiber: + 10-20 g daily** **Total fiber intake: 25-40 g daily**

Slow and steady fiber supplement ramp-up plan	Week 1: 1. Start counting the amount of fiber you consume in your diet on a daily basis. 2. Purchase a fiber product that you will be able to take every day for the rest of your life. Read the label to check the fiber content. Many fiber products, especially fiber pills, have very small amounts of fiber. Choose a fiber product with 5 g or more of fiber per serving. 3. Start drinking 8 to 10 glasses of water daily.
	Week 2: 1. Supplement your diet with 5 g of additional fiber daily. 2. Drink 8 to 10 eight-oz. glasses of water daily.
	Week 3: 1. Supplement your diet with 10 g of additional fiber daily. 2. Drink 8 to 10 glasses of water daily.
	Week 4 and beyond: Continue to increase the amount of additional fiber daily by 5 g per week until you reach your goal of 25 g to 40 g of fiber daily for life. TIP: If you feel bloated or develop excessive gas, you are increasing your daily fiber too quickly. You may need to increase your daily fiber over a longer period of time.

Prebiotik

Probiotik

Özet

- Kolorektal cerrah beslenme desteğinin güncel değil süreğen problemin nedeni ve çözümün ana parçası olabileceğine dikkatle yaklaşmalıdır
- Gerekirse bir diyetisyenle işbirliğinde olmalıdır
- Beslenme ,
- Dışkı kalitesi,
- Dışkılama kalitesi
- Hasta tedavisi ve takibi için
- Koordine ,ölçülen ve değerlendirilen bir süreç olarak beslenme kontrolüve desteği planlanmalıdır.

Sonuç

Anorektal hastalık beslenme nedenli kolorektal hastalığın anorektal semptomları olarak ele alınabilirmi?

Beslenme özellikleri ve bağlaşık faktörleri bunun ana kompanenti olarak değerlendirilebilirmi ?

Beslenme değerlendirilmelidir

Ölçülmeyen şey iyileştirilemez

Kalite kuralı

Teşekkür