

Overview

Exercise plays a key role in physical, mental and emotional wellness; however, for those with IBD and ostomies, pain and symptoms may restrict the ability to engage in regular physical activity. Factors such as fecal incontinence during exercise, a need for steady hydration and access to a restroom may be significant considerations for those with IBD. For those with an ostomy, concerns over protection of their ostomy during exercise and avoidance of chafing of their ostomy may be additional concerns. Certain extraintestinal manifestations (symptoms of IBD and ostomies beyond just the gastrointestinal tract), such as arthralgia/arthritis, anemia contributing to fatigue or bone health issues, can make exercise even more difficult.

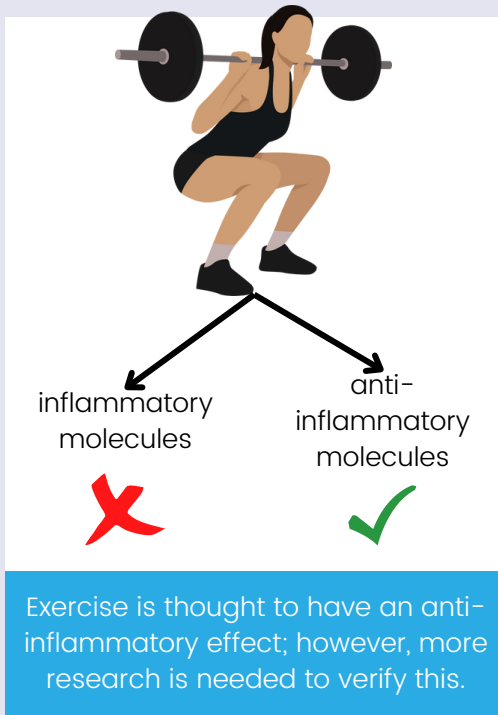


Individuals with IBD and ostomies in remission or with mild disease activity are advised to engage in light to moderate-intensity physical activity

Despite these challenges, individuals with IBD and ostomies are highly recommended to engage in some form of regular physical activity – particularly light to moderate exercise. Recommendations for the general adult advise 150 minutes of moderate-intensity aerobic exercise each week (e.g. walking fast, tennis, water aerobics) in addition to muscle-strengthening activities (weight lifting, resistance-band exercise, certain weight bearing yoga exercise) twice a week. Aerobic exercise is intended for promotion of cardiovascular health whereas muscle-strengthening exercises are advised for maintenance of musculoskeletal health (CDC). As far as specific exercise recommendations for individuals with IBD and ostomies, there are no formal guidelines at this point due to a lack of research on IBD/ostomy and exercise. While there is much headway on the correlation between exercise and IBD/ostomy, further investigations are needed to develop specific recommendations. At this point, studies have shown improvement in quality of life with light to moderate-intensity physical activity for those in remission or with mild disease activity (Hashash).

Benefits of Exercise for IBD and Ostomy Patients

Despite a lack of formal guidelines for physical activity in individuals with IBD and ostomies, we do know that physical activity carries a number of health benefits including but not limited to:



Anti-inflammatory effect: The body utilizes a number of chemical messengers in order to communicate with other parts of the body. One of the most common chemical messengers utilized are cytokines. Cytokines are specifically involved in the initiation and cessation of the inflammatory response. It is thought that in IBD an imbalance of inflammatory cytokines contributes to disease activity and symptoms. Exercise, on the other hand, is associated with release of anti-inflammatory cytokines. Although there is need for further research, one theory is that the release of anti-inflammatory cytokines during exercise may help to balance inflammatory cytokine levels leading to improved disease activity and symptom control (Baker). Research looking at the impact of exercise on IBD disease activity is varied, so at this point, a definitive conclusion cannot be drawn.

Improved quality of life: Numerous studies have supported the relationship between physical activity and improved quality of life. This correlation is likely due to a variety of factors such as stress relief, social benefits, establishment of a routine, etc. Because one of the main goals of IBD and ostomy management is to improve quality of life, utilization of physical activity as a non-pharmacological management technique is significant (Cohen).

Prevention of certain health conditions: Regular exercise has been associated with prevention of numerous health conditions such as cardiometabolic diseases (heart disease and type II diabetes), high blood pressure, high cholesterol, osteoporosis, depression, anxiety and even colon cancer. Because individuals with IBD and ostomies may be predisposed to certain health conditions as a result of their IBD and/or ostomy, focus on modifiable lifestyle factors, such as exercise, can be an important step in prevention of particular health manifestations.



Considerations for IBD and Ostomy Patients

While a number of health benefits can be accrued from physical activity in individuals with IBD, there are certain considerations to keep in mind when approaching exercise:



The "We Can't Wait" app from the Crohn's and Colitis Foundation can be a helpful tool to find nearby accessible restrooms.

Accessibility to restrooms: Certain activities may make it more difficult to exercise with an accessible restroom nearby. For those engaging in activities such as running or cycling, it is recommended to investigate the route you will be taking beforehand to identify restrooms along the way. This can allow you to better modify exercise for restroom stops and ease the fear of an accident. The We Can't Wait app from the Crohn's and Colitis Foundation provides a map of accessible restrooms in varying locations – this can be one of many resources to utilize in mapping out restrooms along your exercise route (see Further Resources for a link to this). In times of more severe disease activity, it may also be useful to utilize a treadmill or stationary bike to ensure restroom accessibility.

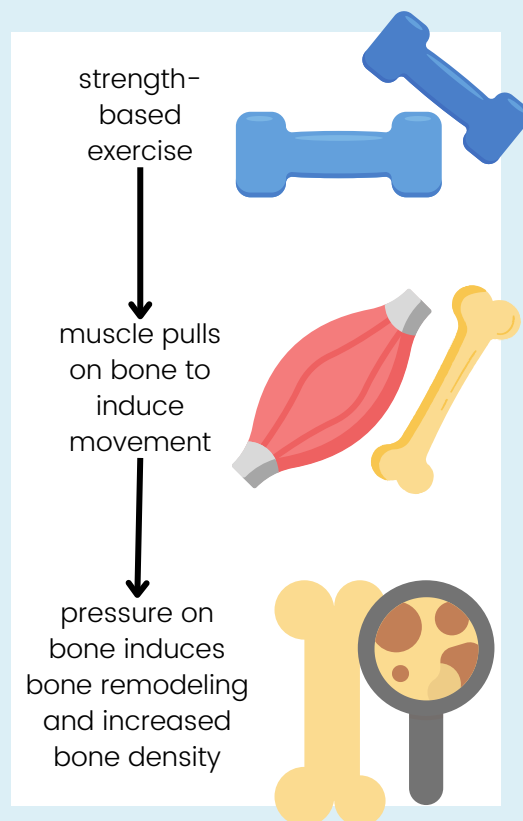
Arthritis/arthralgia: Arthritis (inflammation of a joint) and arthralgia (joint pain) are common complaints amongst individuals with IBD and ostomies (see our Arthritis fact sheet for further information). Not surprisingly, arthritis and arthralgia can also contribute to hesitancy with exercise due to fear of exacerbating pain. Because arthritis and arthralgia as a result of IBD/ostomy are frequently associated with disease activity, it is important to reach out to your gastroenterologist regarding management of IBD/ostomy in order to calm joint conditions.



Arthritis/arthralgia can dissuade many individuals with IBD and ostomy from engaging in regular exercise. Reach out to your healthcare provider if you are struggling with joint pain.

Considerations for IBD and Ostomy Patients (continued...)

Bone density: Individuals with IBD and ostomies may experience decreased bone density due to malabsorption and chronic inflammation associated with their condition (see our Bone Health fact sheet for further information). Fortunately, exercise, in particular strength-based exercise, has actually been shown to increase bone density. In one study of adolescents with IBD (who were in clinical remission), moderate-to-vigorous physical activity was correlated with increased bone mineral density (Trivić). Exercise, especially strength-based exercise, puts pressure on the bones as muscles pull the bones to induce movement. This action causes remodeling of the bone increasing bone density and making the bone stronger. While physical activity can be a great way to increase bone density, for those with a history of low bone density and stress fractures/fractures, it is important to ease into exercise and speak with a healthcare provider to prevent further bone health issues.



Vaseline

Body Glide



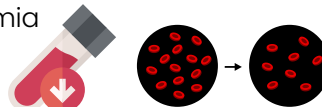


Different products, such as Vaseline or Body Glide, can help to prevent chafing during exercise.

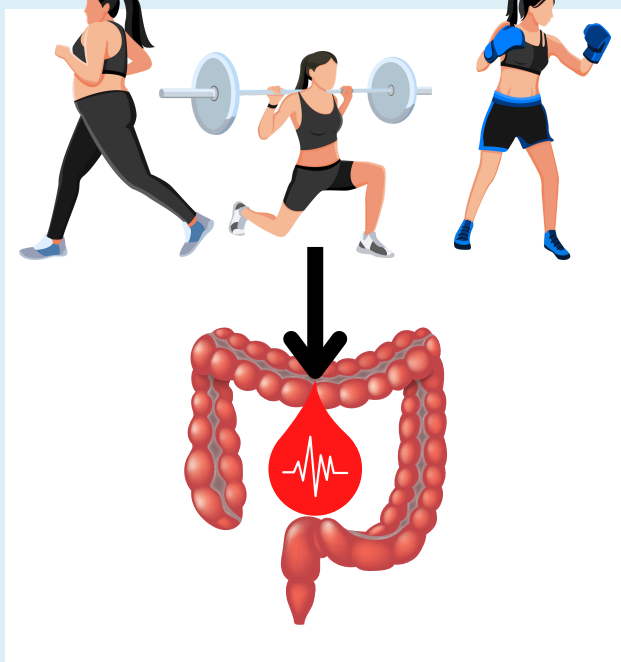
Chafing: Individuals with ostomies may find that certain exercise routines (particularly running) cause chafing of their ostomy. Chafing occurs when the skin rubs against the skin itself or another item (e.g. clothes, backpack, ostomy) causing reddening and possible scabbing of the skin. Chafing can be painful and cause individuals to avoid physical activity. If you struggle with chafing, try Vaseline or Body Glide over the area of chafing the next time you exercise to help lubricate the skin prior to physical activity. You can also try using an ostomy bag with a comfort panel to minimize contact of the bag with your skin.

Considerations for IBD and Ostomy Patients (continued...)

Fatigue: Many individuals with IBD and ostomies struggle with fatigue as a result of anemia, certain medication options, mental health manifestations and a variety of other factors (see our Anemia and Fatigue fact sheets for further information). Constant fatigue can make exercise difficult and prevent individuals with IBD and ostomies from accruing the positive benefits of physical activity. Individuals who have just undergone ostomy surgery will also likely experience fatigue following their procedure. For those struggling to exercise due to fatigue, it is recommended to reach out to a healthcare provider to identify any underlying health issues that could be contributing to fatigue. By doing so, individuals with IBD and ostomies can hope to maintain a regular exercise routine as well as have more energy in other aspects of their life as well.

Fatigue can result from a variety of factors including but not limited to:

- 1 Anemia** 
- 2 Certain medication options** 
- 3 Mental health manifestations** 



Strenuous, high-intensity exercise can lead to temporary disruption of blood flow to the colon causing gastrointestinal distress. This disruption typically resolves after exercise is ceased.

Exercise-induced ischemic colitis: Strenuous, high-intensity exercise (e.g. long-distance running, cycling, triathlons) can cause a reduction of blood flow to the gastrointestinal tract in individuals without IBD or ostomies. This restriction of blood flow is short-term and occurs during strenuous exercise as an adaptation to divert blood flow from the gastrointestinal tract to the muscles for physical activity. This response occurs even in individuals without IBD/ostomy and likely occurs in individuals with IBD/ostomy who choose to engage in strenuous, high-intensity exercise. Although an exact correlation has not been studied, it is thought that exercise-induced ischemic colitis could exacerbate IBD and ostomy symptoms during physical activity. With this being said, exacerbation of symptoms due to exercise is rare, and in most individuals, activity-induced symptoms resolve shortly after the cessation of a workout (Engels).

Considerations for IBD and Ostomy Patients (continued...)

Hydration: Dependent upon the location of disease activity, hydration may be a crucial factor for certain individuals looking to exercise with IBD and ostomy. A significant function of the large intestine is to absorb water from the food and fluids we consume. For those with Crohn's involving the colon, ulcerative colitis or ostomies, hydration can be impaired. Ostomies generally have a higher output consisting of more fluid than typical fecal matter. This means individuals with ostomies must be extra cognizant of dehydration and exercise as they lose more fluids in their ostomy output than in defecation without an ostomy. Staying hydrated for physical activity is an additional factor individuals with IBD and ostomies need to focus on.



Individuals with IBD and ostomies are prone to dehydration. Thus, hydration before, during and after exercise is crucial.



stoma guard



support belt
(from Stealth Belt)

Individuals with ostomies may need to utilize a stoma guard, support belt or support wrap to protect and secure their ostomy during exercise.

Ostomy/stoma protection and security:

Depending upon the activity, it may be recommended to utilize a stoma guard to protect against blunt forces. A stoma guard could be a good idea for individuals participating in sports such as soccer, football, lacrosse, etc. Certain individuals may also find they need to secure their ostomy bag during exercise in order to prevent movement of the bag. Products available include support belts, support wraps or compression clothing.

Ostomy and water sports: Individuals with ostomies may have fear of leakage if participating in any type of aquatic activity. It is important to note that your ostomy should be secure and leak-free; however, this is a valid concern to have. In order to increase personal comfort, you can utilize an aquatic security belt (e.g. stealth belt swimwear) or anti-leak products (e.g. Sure Seal). It may also be helpful to fill a bath, and sit in the bath with your ostomy, to reassure yourself that your ostomy is secure and leak-free.



neoprene belt for swim
(from Stealth Belt)



Sure Seal ring

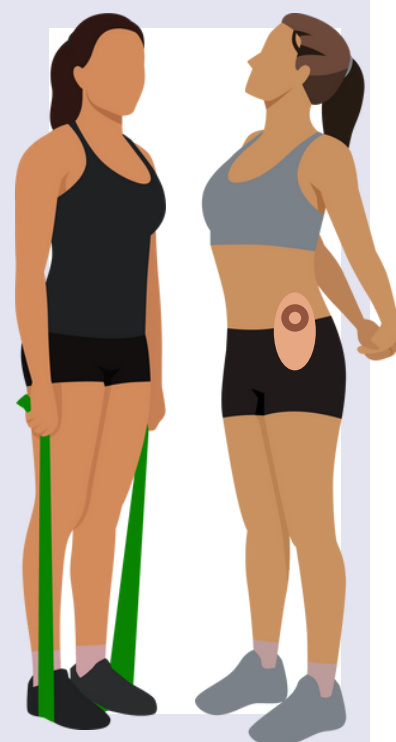
Certain individuals may use a swimwear stealth belt or anti-leak products (e.g. Sure Seal) when doing aquatic sport.

Considerations for IBD and Ostomy Patients (continued...)

Reduced exercise capacity: Individuals with IBD and ostomies have been shown to have decreased exercise capacity, although the exact mechanism behind this is not known. Factors such as reduced anaerobic threshold, muscle strength and heart rate recovery have been shown in IBD and ostomy patients. These components could contribute to poor exercise adaptation making it more difficult to progress one's fitness as compared to the general population (Engels).

General Guidance

Overall, exercise is an excellent tool to manage physical, mental and emotional health in individuals with IBD and ostomies. Currently, there are no formal guidelines for exercise with IBD and ostomy; however, light to moderate-intensity activity seems to accrue benefits for those in remission or with mild disease activity. For those with more severe disease activity or those wanting to engage in high-intensity activity, it is always recommended to speak with your gastroenterologist before undergoing a new exercise regimen. Additionally, for those struggling with a flare, speaking to your gastroenterologist can be helpful in temporarily modifying activity to calm down the flare up. There can be numerous barriers to physical activity for individuals with IBD and ostomies, but through modification of exercise routines and flexibility with one's body, patients with IBD and ostomies can still accrue the positive benefits of exercise.



Further Resources

- Crohn's and Colitis Foundation: We Can't Wait App (<https://www.crohnscolitisfoundation.org/wecantwait>)
- Crohn's and Colitis Canada: Safe and Effective Exercise (<https://crohnsandcolitis.ca/About-Crohn-s-Colitis/IBD-Journey/Exercise-and-Lifestyle/Therapeutic-Monitoring>)
- mySymptoms Food Diary: an app that allows you to track food, exercise, sleep, etc. alongside symptom manifestations

Citations

Baker, Kelly A et al. "The exercise-induced inflammatory response in inflammatory bowel disease: A systematic review and meta-analysis." PloS one vol. 17,2 e0262534. 4 Feb. 2022, doi:10.1371/journal.pone.0262534

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Trivić, Ivana*; Sila, Sara*; Batoš, Ana Tripalo†; Mišak, Zrinjka*; Kolaček, Sanja*,‡; Hojsak, Iva*,‡,§ Moderate-to-Vigorous Physical Activity Is Associated With Higher Bone Mineral Density in Children With Inflammatory Bowel Disease, Journal of Pediatric Gastroenterology and Nutrition: January 2022 - Volume 74 - Issue 1 - p 54-59 doi: 10.1097/MPG.0000000000003258

Written by Catherine Liggett

Medically reviewed by Kathryn Vidlock M.D.

