



BREAKING BARRIERS TO SPORT FOR PEOPLE WITH IBD

GUIDE FOR WORKING WITH PERSONS LIVING WITH INFLAMMATORY BOWEL DISEASE

A practical manual for
coaches, instructors, guides and activity leaders

• FIRST EDITION •

PREPARED WITHIN THE BOOST PROJECT (ERASMUS + SPORT)

BOOST

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NOTES AND HOW TO USE THIS GUIDE

Important disclaimer

This guide is educational. It does not replace medical or psychological consultation, diagnosis or treatment, and it does not authorise any instructor to give medical advice. Every participant living with IBD should discuss physical activity with their gastroenterologist before starting, and especially after surgery, during an active flare, or when a new therapy is introduced. The instructor adapts the activity; assessment, diagnosis and clinical recommendations stay with the medical team.

About this guide

Audience: sports instructors, coaches, mountain and hiking guides, fitness and wellness trainers, physical education teachers, volunteers and activity leaders who work – or want to work – with participants living with Crohn's disease or ulcerative colitis. Purpose: to give non-medical professionals enough understanding of Inflammatory Bowel Disease (IBD) to run activities that are safe, adaptable and genuinely inclusive, and to give them ready-to-use tools: session structures, self-regulation scales, communication scripts, checklists and emergency protocols. The guide was produced within the BOOST project, a transnational cooperation between patient associations and sports organisations in Italy, Croatia and Serbia. It brings together the perspective of gastroenterologists, psychologists, sports methodologists and people who live with IBD every day.

How to use this guide

The guide is written to be read once from beginning to end, and then used as a reference. Chapters 1 to 3 build understanding; Chapters 4 to 6 are operational; Chapters 7 and 8 connect you to the wider support network; the annexes hold the material you will print and use on site.

Chapter	What it gives you	When to return to it
1. What is IBD?	The disease in plain language: symptoms, variability, invisible burden.	Before your first session with a participant with IBD.
2. Medical aspects	How to read a medical recommendation; anaemia, nutrition, bone health, surgery, therapy effects.	When a participant brings you a doctor's note, or mentions a new diagnosis or medication.
3. Psychosocial aspects and stigma	Why the psychological load matters as much as the physical one; how to build a safe group culture.	When designing group rules, and whenever a participant withdraws or drops out.
4. Adapting the training process	Methodology, the three-level self-regulation system, and the operational sport sheets.	Every session. This is the working core of the guide.
5. Creating an inclusive environment	Toilets, privacy, facility audit, empathy without pity.	When choosing or setting up a venue, and at the start of every new course.
6. Emergency and communication protocols	What to do when someone feels unwell; how to ask about needs without intruding.	Print the protocols and keep them at the venue.
7. Support network	Patient associations, physicians, referral pathways.	When you need help beyond your competence.
8. Contacts	Who to write to, in each partner country.	Any time.
Annex A	Competitive sport with IBD.	When a participant wants to move from recreation into competition.
Annex B	Intake form, session card, incident record, pocket card for the wall.	Print them before your first course.

A note on language

Throughout this guide we write "person with IBD", "participant" or "person living with IBD", and keep the word "patient" for the medical chapter, where the clinical relationship is the subject. In your gym, on your trail or in your dance hall, the person in front of you is a participant. They are a patient in the consulting room.

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INTRODUCTION - THE POWER OF CHOICE: THE ROLE OF THE INSTRUCTOR IN CREATING OPPORTUNITIES

For most people, choosing which sport to practice is a matter of taste, convenience, or ambition. For an individual affected by frailties or chronic pathologies such as IBD, choice is instead a luxury that often cannot be afforded. Mental and physical barriers, combined with the chronic lack of a truly inclusive sports offer and the poor preparation of technical staff, force the majority of patients into inactivity and social self-isolation.

As sports professionals, our primary task within the BOOST project is to create the conditions in which choice becomes possible. This manual gives you the tools to understand the condition and adapt your methodology. Offering participants flexible options and the freedom to regulate their own effort, without the weight of being judged, breaks down the wall of mistrust. Giving them the power to choose whether to take part, how to move, and when to stop is the psychological key to motivation, rebuilding confidence, and real inclusion through sport.

The idea behind this guide

Your job is to build a space where a person whose body has become unpredictable can still make decisions about it. The medical background, the psychology, the traffic-light system, the toilet checklist and the scripts in the chapters that follow all serve that purpose.

WHAT IS IBD? UNDERSTANDING THE CONDITION



The basics of the disease

Inflammatory Bowel Disease (IBD) is the umbrella term for two chronic, lifelong conditions of the digestive tract: Crohn's disease and ulcerative colitis. Both are caused by an altered and exaggerated immune response to environmental or internal triggers. In genetically predisposed people, this overreaction produces a pronounced and uncontrolled inflammatory process which

predominantly affects the wall of the small and large intestine (exceptionally also the oesophagus, stomach and duodenum), and which in its evolution leads to temporary or permanent damage of the intestinal wall and to a disturbance of the function and integrity of the digestive tract.

At the centre of this altered immune process is a large number of inflammatory factors, so-called mediators of inflammation. These molecules help activate and coordinate communication between immune system cells, supporting physiological balance and an adequate immune response. When their balance is disturbed and they act under pathological stimuli, they favour the inflammatory process.

This is the key point for anyone working in sport: the altered ratio of inflammatory mediators, their constant presence in the systemic circulation and the state of maintained inflammation define the chronic and systemic character of these diseases, even in the absence of symptoms and signs. This also explains the involvement of other organ systems, the appearance of extraintestinal manifestations, and disturbances in overall health, including chronic fatigue, weakness, psychological effects, and changes in metabolic and systemic balance.

In one sentence: IBD is a systemic immune-mediated disease whose main battlefield is the bowel. Fatigue, joint pain, anaemia and low mood belong to the disease just as much as diarrhoea does.

Crohn's disease and ulcerative colitis – what differs

	Crohn's disease	Ulcerative colitis
Location	Any segment of the digestive tract, from mouth to anus; most often the terminal ileum and colon. Often patchy, with healthy segments in between.	Limited to the colon and rectum; continuous inflammation spreading upwards from the rectum.
Depth	Affects the full thickness of the bowel wall, which is why fistulas, abscesses and strictures occur.	Affects the mucosal (inner) layer.
Typical complications	• Strictures (narrowing) • Fistulas, including perianal fistulas • Abscesses • Repeated resections → short bowel syndrome	• Severe flares with heavy bleeding • Toxic dilatation of the colon (rare, emergency) • Colectomy with pouch formation
Surgery	Frequently segmental resection; does not cure the disease.	Colectomy removes the diseased organ; often followed by an ileo-anal pouch or a permanent stoma.

Symptoms: what they actually feel like

Inflammatory bowel diseases occur in the largest proportion in the younger population, with the dominant incidence between 20 and 40 years of age. The appearance of a chronic disease during what is potentially the most productive part of life can have a serious and lasting impact. This period often includes schooling, the beginning of a professional career, social relationships, the reproductive years, and family planning, together with the specific psychological and physiological characteristics of this age group.

Above all, however, the greatest burden is the nature of the disease itself, particularly the characteristics of its symptoms and signs. These include persistent abdominal pain, episodes of elevated body temperature, loss of appetite and body weight, and disturbed bowel function, particularly the frequent passage of loose stools, often with blood and mucus. Other symptoms include exhaustion, changes in psychological well-being, and changes in body image. Together, these lead to the need for social isolation, the inability to carry out everyday activities in education or professional tasks, the inability to establish social and sexual contacts, and a further deterioration of psychological and physiological status.

Symptom	What the person experiences	What it means for your session
Urgency	Almost no warning between the first signal and the need for a toilet – sometimes seconds.	Toilet access decides whether the person attends at all. See Chapter 5.
Frequency	Up to 10–20 bowel movements a day in a severe flare.	Sessions must tolerate exits and re-entries without comment.
Abdominal pain and cramping	From dull background ache to acute cramps that stop movement entirely.	Avoid pressure on the abdomen, deep flexion, and high intra-abdominal pressure.
Blood and mucus in stool	Frightening and exhausting; a marker of active disease.	A new occurrence is a red flag – stop and refer to a doctor.
Fatigue / weakness (fatigue)	Exhaustion unrelated to effort, not relieved by rest or sleep.	The single most common reason for missing sessions. Never read it as low motivation.
Weight loss, loss of appetite	Loss of muscle as much as fat.	Strength work is protective, but it must start below the level you would assume.
Fever, night sweats	Systemic inflammation.	Do not train. Refer to a doctor.
Joint pain and stiffness	Extraintestinal manifestation; may flare independently of the bowel.	Adapt impact and range of motion; mobility work helps.

Variability: remission and relapse

The defining feature of IBD, and the one that matters most to an instructor, is that it does not stand still. The same person may complete a five-hour mountain hike in June and be unable to walk to the end of the street in September. Nothing about their character, discipline or motivation has changed in between.

Remission

Remission is a period in which the disease is controlled: symptoms are absent or minimal, inflammatory markers are low, and everyday life is largely unrestricted. Remission means control, not cure. The systemic inflammatory process may continue quietly, and fatigue frequently persists into remission. A participant in remission may still have a genuinely reduced capacity for effort.

Relapse (flare)

A relapse is a return of active inflammation. It can develop over days or over hours. During a flare, physical capacity may drop to a fraction of the person's baseline; the priority shifts from progression to maintenance, and sometimes to rest alone.

The in-between

Most days for most people are neither a clean remission nor a full flare. They are a moving mixture: a good week with two bad mornings; a stable month with unreliable sleep. Any training system that only offers two settings, "healthy" and "ill", will fail. This is exactly the problem the three-level self-regulation system in Chapter 4 is designed to solve.

What variability means in practice

- Plan in ranges: "20–40 minutes", rather than "35 minutes".
- Ask at the start of every session, and not only once at enrolment.
- Design courses so that missing two sessions never means falling permanently behind.
- Read a drop in capacity as information about the disease.

The invisible burden

IBD is an invisible illness. A participant may look healthy, athletic and rested while managing pain, urgency and profound exhaustion. This invisibility has two consequences. First, it means that others, including instructors and fellow participants, systematically underestimate the effort involved in simply showing up. Second, it places the person in a permanent dilemma: to disclose and risk being treated as fragile, or to stay silent and be judged as uncommitted.

Fatigue deserves separate mention because it is so poorly understood. Weakness (fatigue) is an important and often unrecognised clinical problem, accompanied by a marked consequent disturbance of quality of life, working ability, functioning and the possibility of carrying out physical and sports activities. It is often the patient's greatest concern; it occurs in around 80% of

patients with active disease, but also in half of patients in remission. It is a burdensome symptom characterized by exhaustion and lack of energy, unrelated to physical effort, that does not improve with rest or sleep, unlike ordinary tiredness.

Extraintestinal manifestations

IBD can affect organs far from the bowel. The most frequent extraintestinal manifestations affect the bone-joint and muscular system. They can sometimes occur as overlapping immune-mediated diseases, producing joint and muscle pain, a feeling of stiffness in the joints, and sometimes joint inflammation. These manifestations usually accompany the more severe forms of inflammatory bowel disease and marked activity; besides basic therapy they often require symptomatic treatment, within which relief of complaints and a predisposition for physical activity is possible.

Other systems may also be involved: the skin, the eyes, and the liver and bile ducts. For an instructor the practical implication is simple. A participant with IBD who reports joint pain, eye inflammation or a new skin lesion may be describing part of the same condition, and it belongs with their doctor.

Surgery, stoma and pouch

A substantial proportion of people with IBD will undergo surgery. Postoperative states that may affect physical activity include having an ileostomy or colostomy, or having undergone a colectomy with pouch formation. The impact may relate to symptoms, bowel function, and hygiene. In such situations physical activity can be adapted with appropriate interventions, for example mechanical protection of the stoma, the use of antidiarrhoeal medication, and similar measures.

People with a stoma hike, swim, run, climb, play table tennis and lift weights. What they need from you is predictable access to a private space, no exercises that press directly on the stoma site, awareness that hydration and electrolyte needs are higher, and mechanical protection of the stoma in contact or fall-risk activities.

Understanding and recognising specific needs

Needs in IBD are individual, but they cluster into a small number of recurring categories. Recognising which category is in play tells you which adaptation to reach for.

Category of need	How it shows up	Your response
Access	Questions about toilets before enrolling; choosing a spot near the door; leaving early.	Guarantee and announce toilet access; design routes and sessions around it.
Energy	Arriving exhausted; strong day-to-day variation; withdrawal after intense sessions.	Offer intensity levels; allow partial participation; protect recovery.
Biomechanical protection	Avoidance of abdominal work, jumping, deep twisting; post-surgical restrictions.	Substitute exercises; eliminate Valsalva and maximal effort in apnoea.
Predictability	Anxiety about unfamiliar venues, unclear session length, surprise changes.	Publish the plan; state duration; announce changes in advance.
Privacy	Reluctance to explain absences; discomfort with public attention.	Never comment on exits or absences; handle all disclosure one-to-one.
Belonging	Fear of being “the ill one” in the group; dropping out after a flare.	Normalise adaptation for everyone; make return frictionless.

MEDICAL ASPECTS

This chapter gives you what you need in order to read, respect and act on the judgements made by doctors, and to recognise the small number of situations in which you stop and refer. Clinical judgement stays with the medical team.

The three rules of the instructor's medical role

- You never diagnose, never assess disease activity, and never advise on medication.
- You always translate a clinical recommendation into a concrete training decision – that is your professional contribution.
- You always stop and refer when a red flag appears (see 2.9).

How to interpret medical recommendations

Participants will bring you medical information in very different forms: a formal certificate, a sentence remembered from a consultation, a printed discharge letter, or nothing at all. Your task is to convert whatever you receive into three operational answers: what is forbidden, what is limited, and what is unrestricted.

What you may receive	What it usually means	What to do with it
"Fit for recreational physical activity"	General clearance for moderate, non-competitive activity. It does not authorise maximal effort, contact or competition.	Proceed at moderate intensity. Ask specifically about abdominal loading and impact.
"Avoid strenuous exercise"	Avoid high-intensity, maximal and exhaustive effort, not avoid movement.	Keep to conversational aerobic intensity and endurance-strength work. Do not stop the programme.
"No abdominal loading for X weeks" (post-surgery)	A time-limited surgical restriction on the abdominal wall.	Remove all direct abdominal work, planks, heavy lifting, hanging. Diarise the review date; do not reintroduce early.
"In remission, no restrictions"	Clinically stable. Fatigue may still be present.	Full programme available, but keep the self-regulation system running.
A discharge letter you cannot interpret	Anything from routine to serious.	Do not guess. Ask the participant to obtain one sentence from their doctor answering: what should be avoided, and for how long?
Nothing at all	The person has not discussed activity with their doctor, which is very common.	Start at the lowest level of the self-regulation system and ask them to raise it at their next appointment.

The three questions to send to the doctor

If a participant is willing to ask their gastroenterologist only three questions, these are the ones that will help you most. Give them to the participant in writing so they can take them to the appointment:

- Are there any movements or positions I should avoid at the moment, such as abdominal loading, deep twisting, impact, or jumping?
- Is there a limit on the intensity or duration of aerobic activity I should respect right now?
- Is there anything in my current condition or therapy, such as anaemia, bone density, a recent operation, or a stoma, that my instructor should take into account?

What the evidence says about exercise in IBD

Data on the effects of physical activity in inflammatory bowel disease are still limited. Most controlled studies and meta-analyses have worked with small groups, and the interpretation of results has been affected by subjectivity and bias. The literature nevertheless allows the basic relationship between physical activity and IBD to be described, in two directions: activity as prevention, and activity as part of treatment.

Physical activity as prevention

Randomised clinical and epidemiological studies have not confirmed a statistically significant difference in the appearance of IBD among people who were physically active in childhood or in the five years before diagnosis. They have shown a lower incidence compared with people who were not physically active, and the data support this for Crohn's disease rather than for ulcerative colitis. The explanation offered is that physical activity shifts the balance between pro-inflammatory and anti-inflammatory cytokines, which changes the immune response.

Physical activity as therapy

The therapeutic role of physical activity in inflammatory bowel disease is increasingly recognized, making it a valuable addition to standard treatment. However, it is not a substitute for conventional forms of treatment.

A protective effect of physical activity has been confirmed in chronic diseases, cardiovascular disease, diabetes and some malignancies. In IBD, as chronic and immune-mediated diseases, a favourable effect can be expected through influence on various functions of the immune system, at several levels:

- **Gut microbiome and metabolic activity:** increased bacterial diversity, increased production of short-chain fatty acids (SCFA), reduced lipopolysaccharide translocation, and prevention of TLR-4 receptor activation as one of the key receptors of immune regulation.
- **Skeletal muscle and cross-talk mechanisms** (communication with other organ systems mediated by myokines): lipid and glucose metabolism, immune and anti-inflammatory activity, bone metabolism, cognitive function.
- **Epigenetic modification:** increased transcription of key regulatory, metabolic and myogenic genes.
- **Intestinal motility:** mucosal immunity, epithelial barrier, tissue regeneration.
- **Adipocytes** (adipokines as immune mediators): reduction of visceral fat, reduced production of the inflammatory cytokines TNF-alpha and IL-6.

- **Cytokine activity:** improved energy balance and tissue metabolism.

Effects on disease activity and inflammatory markers

A prospective study of 1,857 participants showed a significant reduction in the risk of relapse and of marked Crohn's disease activity over six months among people who were regularly physically active. Among 312 people with IBD in long-term remission and off medication who were active daily, there was no increase in relapse. In people with ulcerative colitis, moderate activity measured as number of steps walked had a favourable effect on disease activity and on serological markers.

Many studies have not confirmed a favourable therapeutic effect. Age, participant characteristics, intensity, disease phase and study design all limit the interpretation. Most of the research was carried out in people with mild to moderate disease activity, because symptom severity, chronic fatigue and psychological factors make participation harder in more severe disease.

In most studies, moderate physical activity did not worsen symptoms or disease activity, and did not raise serological markers of inflammation (CRP, ESR, faecal calprotectin). High-intensity physical activity, on the other hand, can have a pro-inflammatory effect, reduce circulation in the digestive tract, and produce a transient worsening of symptoms.

What this means for your sessions For most people with IBD, moderate activity is safe and beneficial, and does not appear to provoke flares. The risk sits with high-intensity work. This is why every sheet in Chapter 4 caps intensity rather than volume. Benefit appears at very low doses: thirty minutes of walking, three times a week, was enough to produce a measurable improvement in quality of life.

Effects on quality of life and mental health

According to available data, only a small proportion of people with IBD engage in regular physical activity, and it is usually light to moderate. The reasons are chronic fatigue, pain, stress, anxiety, depression, and fear of urgency and frequent bowel movements. Physical activity produces a feeling of increased energy, reduces muscle and joint pain, increases bone and muscle strength, and has a favourable effect on psychological factors.

One study confirmed a statistically significant improvement in quality of life among people with mild Crohn's disease who walked for 30 minutes a day, three times a week, over three months, compared with people who were not physically active. A mild improvement in anxiety and depression has been confirmed with physical activity of any intensity, and it lasts as long as the activity is maintained.

It should also be noted that physical activity reduces the incidence of colorectal cancer by up to 50%, which is particularly significant in inflammatory bowel disease, where this cancer occurs more frequently than in the general population.

Anaemia

A large proportion of patients with IBD also have anaemia. Anaemia in these diseases usually follows a chronic course, is present even in phases of remission, and is usually worse in relapse. Its chronic course is defined by the underlying mechanism: anaemia in IBD is usually a combination of so-called anaemia of chronic disease and iron-deficiency anaemia (reduced intake and absorption, chronic inflammation, and iron loss through bleeding).

Because of this complex mechanism, adequate assessment of the characteristics and severity of anaemia is required. Assessment is carried out at diagnosis, at regular check-ups and at any deterioration, and matters because it determines how the anaemia is corrected. In most cases anaemia in IBD is corrected by parenteral iron substitution, and in severe cases by transfusion. Depending on its severity and the degree of iron deficiency, anaemia may be accompanied by symptoms that mostly reflect a disturbance of general condition, including weakness, fatigue, intolerance of effort, sometimes even minimal effort, a feeling of light-headedness, dizziness, rapid heart rate, and loss of appetite.

Physical activity in the context of accompanying anaemia should be adapted to the severity of the anaemia, the degree of iron deficiency, the symptoms present, and the activity of the underlying disease. Light to moderate physical activity is advised, with a possible increase in intensity depending on recovery from the anaemia and resolution of symptoms.

What anaemia looks like on the training floor

- Breathlessness and a racing heart at intensities the person handled easily a month ago.
- Dizziness on standing up, on climbing, or at the end of a set.
- Pallor, cold hands, unusual difficulty warming up.

If these appear or worsen: reduce intensity immediately, avoid positions where a faint would be dangerous (climbing, poolside, single-leg balance on hard floors), and ask the person to raise it with their doctor.

Nutrition, malnutrition, sarcopenia and short bowel syndrome

Assessment of metabolic status is necessary in every patient with IBD. Chronic inflammation and inadequate, unbalanced nutrition lead to a disturbance of metabolic pathways and of the intake and utilisation of micronutrients, vitamins and minerals such as iron, zinc, selenium, copper and iodine. These micro-elements are essential in basic chemical processes in the body, and their deficiency can further worsen and intensify the chronic inflammatory process, and consequently the symptoms of the disease.

Particular significance is attached to the assessment of vitamin D status. So-called extra-skeletal vitamin D does not play the dominant role in bone mineralisation. It also has an important role in immune function, influencing the proliferation and differentiation of immune cells, immunomodulation, and the microbiome. An association between low vitamin D levels and the development of anaemia of chronic disease has also been confirmed. Its anti-inflammatory

effect is reflected in the relationship between its concentration and the concentration of pro-inflammatory cytokines. For this reason, assessment of serum vitamin D and appropriate correction or supplementation is important in every patient, with the aim of controlling inflammation.

Sarcopenia – the most direct limitation on training

Malnutrition shows itself predominantly in total muscle mass rather than in body weight alone. The degeneration and reduction in the quality and strength of muscle mass is called sarcopenia, and it is one of the principal measures of malnutrition. Muscle mass and strength, and with them the capacity for physical and sports activity, decrease as a direct consequence.

Besides reduced appetite and nutrient intake, malnutrition is influenced by disease severity and activity, psychological factors, marked inflammation, and loss of nutrients due to disturbed bowel emptying and pronounced catabolism. Loss of muscle mass and sarcopenia are additionally driven by prolonged immobilisation due to repeated hospitalisations and bed rest, as well as by the absence of even minimal physical activity.

With gradual recovery of muscle mass and body weight, individual optimisation of physical activity can be planned, taking account of possible accompanying limiting factors such as anaemia, vitamin D deficiency, and associated disturbance of bone metabolism.

Short bowel syndrome

Short Bowel Syndrome (SBS) is a possible complication of Crohn's disease, a condition in which the loss of functional intestinal length prevents adequate intake and absorption of nutrients in the small intestine. It usually arises after repeated resections of the small intestine because of complications such as strictures, abscesses or fistulas. It is accompanied by a constant picture of severe malnutrition and the need for permanent special nutritional formulations (parenteral or enteral nutrition), and as such usually by the impossibility of carrying out regular physical and sports activity.

Bone health

Metabolic bone disease, including osteopenia and osteoporosis, which involve reduced bone density, occurs in 2–15% of people with IBD. The incidence of osteoporosis is twice as high as in the healthy population. The tendency to pathological bone fractures in the IBD population is consequently two to three times higher than in the general population, irrespective of age, and there is also an increased tendency to early degenerative disease of bones and joints.

The development of metabolic bone disease is influenced by vitamin D deficiency, which is necessary for bone mineralisation, malnutrition, chronic inflammation, and, most importantly, prolonged and repeated use of corticosteroids. An unwanted effect of systemic steroids is increased breakdown and resorption of bone density; every use of steroids requires vitamin D supplementation. For this reason, diagnostic screening of bone density is important in IBD patients, for adequate therapeutic approach, prevention of pathological fractures, and

assessment of the feasibility of physical activity depending on the degree of metabolic bone disease and possible accompanying degenerative changes.

Training implications of reduced bone density

- Weight-bearing and resistance work is protective – it should be included, not avoided.
- Avoid high-impact landings, uncontrolled jumps and end-range loaded spinal flexion.
- Prioritise fall prevention: balance, proprioception, safe surfaces, adequate lighting, no loose mats.
- Progress load slowly (approximately 5–10% per week) and never to muscular failure.

Complicated phenotypes and post-surgical states

Limiting factors in carrying out physical and sports activities may be complicated forms of the disease or specific states after surgical treatment. Complicated Crohn's disease often manifests through the appearance of fistulas – pathological communications between the bowel and other hollow internal organs such as the bladder, the vagina, or an adjacent loop of small bowel or segment of large bowel, and also between the bowel and the external environment, the abdominal wall and the skin (so-called enterocutaneous fistulas).

A particular form is perianal disease. Perianal fistulas represent a severe form of the disease because of their location, the nature of the symptoms, and the tendency to form purulent collections and abscesses. The fistulising form of Crohn's disease makes physical and sports activity considerably more difficult in a large proportion of cases, both because of marked disease activity and because of a pronounced disturbance of general condition and quality of life. However, even in this situation, activity can be adapted according to the individual characteristics of the patient.

Condition	Specific precautions
Perianal disease / perianal fistulas	• Avoid activities involving a prolonged seated position (for example cycling), because of the unfavourable mechanical effect • Avoid bathing and swimming in pools, lakes and the sea, because of the increased risk of local infection • Avoid more extreme sports or more intensive physical effort, because of the possibility of worsening fistula activity • Prefer standing, walking and upright activities; use a saddle-free option if a seated modality is unavoidable
Strictures	• Symptoms of obstruction (severe cramping, vomiting, distension) after eating are a medical emergency – not a training problem • Avoid exercising soon after a meal • Any new obstructive symptom means stopping and referral
Ileostomy / colostomy	• Mechanical protection of the stoma (support belt, stoma guard) for contact or fall-risk activities • No direct pressure, weight or strap across the stoma site • Higher fluid and electrolyte needs, especially with an ileostomy and in heat • Guaranteed access to a private space with a washbasin • Progressive core work only, and only with surgical clearance – parastomal hernia risk
Ileo-anal pouch	• High stool frequency persists; plan toilet access accordingly • Attention to hydration and skin care • Avoid prolonged pressure on the perineal region
Recent abdominal surgery	• Absolute respect for the surgeon's time frame on abdominal loading • No planks, hanging, heavy lifting or Valsalva manoeuvre until cleared • Begin with breathing and gentle mobility – see the RED level in Chapter 4

Fatigue

Fatigue in IBD is linked to several factors – malnutrition, anaemia of chronic disease and iron-deficiency anaemia, the use of medication such as steroids, immunomodulators and antidepressants, and micronutrient deficiency. The greatest significance is attributed to disturbance at the level of the gut microbiome, dysbiosis. In inflammatory bowel disease, dysbiosis conditions a disturbance of the gut–brain axis, changing the permeability of the intestinal membrane and conditioning systemic effects of bacterial products and cytokines, predominantly on the brain. This produces a picture of neuroinflammation and altered responses of the central and autonomic nervous system, with consequent symptoms of fatigue.

Within this framework, compromised possibilities for physical and sports activity should be improved at several levels: through action on diet, correction of the microbiome, control of the

activity of the underlying disease, correction of anaemia, supplementation with micronutrients and vitamins, and action on psychological function and quality of life.

For the instructor, one counter-intuitive fact is decisive: although it seems that physical activity will further increase exhaustion, research shows the opposite. Even moderate activity reduces the feeling of fatigue in the long term and increases energy and functionality. The practical consequence is that a fatigued participant should be offered a smaller session, not sent home.

Understanding the impact of therapy on motor capacity

Therapeutic modalities in inflammatory bowel disease do not have a major unfavourable influence on physical and sports activity. Certain medications, however, produce side effects that an instructor will encounter directly.

Therapy group	Relevant effects	Adaptation
Corticosteroids	- Feeling of weakness as a side effect - Unfavourable influence on psychological factors (mood swings, irritability, insomnia) - Unfavourable influence on bone and muscle metabolism – reduced bone density, proximal muscle weakness - Fluid retention and weight change affecting body image	- Include weight-bearing and resistance work for bone protection - Avoid high-impact and fall-risk elements - Expect and normalise mood variability - Never comment on body-shape changes
Immunomodulators (e.g. azathioprine, methotrexate)	- Chronic side effects in the form of muscle and joint pain - Disturbance of general condition and weakness - Increased susceptibility to infection	- Adapt range of motion and impact on painful days - Basic hygiene of shared equipment - Do not train a participant with an acute infection
Biological and advanced therapy	- No unfavourable influence on physical activity - Administered by infusion or injection on a schedule; some people feel tired for a day or two afterwards	- Full programme available - Where possible, schedule demanding sessions away from infusion days
Aminosalicylates (5-ASA)	Generally well tolerated; no significant impact on motor capacity	No specific adaptation
Symptomatic and concomitant therapy	- Analgesics and anti-rheumatics used for joint manifestations may mask pain - Antidiarrhoeals used situationally before activity	- Be cautious with range of motion when pain is masked - Respect the person's timing decisions without comment

Anti-doping note. For participants who compete under a system subject to anti-doping rules, it is necessary to check in advance whether any part of their therapy, particularly corticosteroids,

requires a Therapeutic Use Exemption (TUE) from the relevant anti-doping organisation. This is the athlete's responsibility, but a well-informed coach should raise the question early.

General recommendations and red flags

Baseline recommendations

Physical activity in inflammatory bowel disease should be adapted to the severity and activity of the disease (remission or relapse), to age, to comorbidities, to therapy modalities, and to metabolic or clinical complications. Within these limits, the following can be defined as general recommendations:

- 150 minutes per week of moderate aerobic activity – walking, cycling, swimming.
- 2–3 strength training sessions per week.
- The inclusion of lighter sessions such as stretching or relaxation exercises.

Physical activity includes walking, relaxation and yoga as much as it includes sport. The level of activity is determined according to the individual characteristics of the person.

Red flags – stop the session and refer

Stop training immediately and advise medical consultation if the participant reports or shows:

- New or increased blood in the stool
- Fever, chills or night sweats
- Severe abdominal pain, especially with vomiting or abdominal distension (possible obstruction)
- Persistent fatigue that does not resolve with rest, or a sudden marked drop in capacity
- Unexplained weight loss
- A change in bowel frequency that the person describes as unusual for them
- Fainting, near-fainting, or chest pain
- Signs of dehydration: dizziness, dark urine, cramping, marked thirst, reduced output (particularly with an ileostomy)

None of these are for you to interpret. Your role is to recognise them, stop, and say clearly: this needs your doctor, not more training.

Competitive sport with IBD

Recreational activity and competitive sport place very different physical and mental demands on the body. Participants who want to move beyond the recreational level into regular competition, such as races, tournaments, and leagues, need a medical and professional team around them, cyclical training planning, an individualised nutrition plan, and a plan for travel and anti-doping requirements. The full guidance is in Annex A.¹

Summary of the medical chapter

Physical and sports activities in inflammatory bowel disease are limited by the existence of complex factors that characterise these diseases. Although this topic is often neglected in clinical practice, it represents a very important characteristic of general condition and quality of life. The known negative aspects of the disease that can reduce physical activity include chronic weakness, anaemia, malnutrition, side effects of medication, marked disease activity, complicated forms of the disease, and psychological factors. However, the beneficial effects of physical activity in chronic inflammatory diseases are often given less attention, despite evidence of its measurable metabolic and systemic effects on inflammation.

In the future, with a greater number of expected clinical and scientific studies on this topic, physical and sports activities could also be regarded as an important therapeutic modality in the treatment of chronic inflammatory bowel diseases. Meanwhile, one of the key roles of gastroenterologists in this field is to educate and motivate patients and emphasise the importance of physical activity as an important aspect of quality of life. This is a role that instructors and coaches also share.

PSYCHOSOCIAL ASPECTS AND STIGMA

Life with IBD brings far more than physical symptoms. A chronic illness is a permanent source of stress and burden – it carries a series of emotional, social and practical challenges that reach deep into everyday life. Research shows that people living with IBD more often experience elevated levels of stress and anxiety, lowered mood, and a damaged quality of life and relationship with their own body.

The psychological barriers described in this chapter are, in practice, the main reason why people with IBD never appear in your class, and the main reason why they disappear again after a flare once they have appeared.

¹Annex A – Competitive sport with IBD, at the end of this guide.

How IBD affects psychological wellbeing

Elevated levels of stress

The uncertainties and demands of a chronic condition are a considerable burden on a person's psycho-physical resources and contribute to a higher level of stress, particularly in phases of deterioration. In stressful states, the systems responsible for detecting threat and protecting the organism are activated. The person enters a kind of survival mode, visible on both the bodily and psychological levels. The body responds with heightened arousal, tension, fatigue and elevated stress-hormone levels; on the psychological level, worry, frustration, irritability, difficulties with concentration and emotional exhaustion appear.

Psychological and bodily processes are interwoven and influence one another. Prolonged stress can act unfavourably on the immune system and inflammatory processes, while the illness itself increases sensitivity to stress. This creates a vicious circle in which the illness intensifies stress and stress makes coping with the illness harder. Alongside treatment and control of the disease, it is therefore essential to care for psychological wellbeing and to develop effective strategies for coping with stress.

Elevated anxiety

Characteristic features are fear of the sudden appearance of symptoms, heightened focus on bodily sensations, and a sense of insecurity and loss of control. Many people are preoccupied with questions such as: "What if I do not have access to a toilet?" or "What if the disease flares again?" Over time, a person may become intensely focused on monitoring bodily symptoms, anxiously supervising their own body and fearing their own physical sensations. They tend to become passive and to avoid physical activity out of fear of unpleasant sensations. This state of constant readiness further intensifies tension and anxiety and reinforces the experience of the body as a source of discomfort and danger.

Lowered mood

The illness brings certain limitations and losses, which naturally affects mood and the sense of fulfilment and achievement. Sometimes it is necessary to adapt plans, give up some activities, or invest considerable energy in caring for one's own health. A person may have less energy and withdraw from activities that were important to them and brought them satisfaction. It is entirely natural for people to experience moments of sadness, discouragement, dissatisfaction or helplessness. Symptoms of physical fatigue often interweave with psychological aspects – a drop in motivation, listlessness and a sense of failure.

A damaged image of one's own body

We are bodily and psychological beings. We experience the body as the foundation of our identity, through which we test reality, express ourselves and establish relationships with others and with the world. In many people with IBD, the body becomes associated with pain, discomfort, uncertainty and loss of control. Some have the impression that their body has "betrayed" them, or that they can no longer fully trust it. They feel uncomfortable in their own skin. They experience the body exclusively as a source of threat: they anxiously monitor sensations, or they "detach"

from it, muting even positive bodily experiences in order to protect themselves from pain and discomfort.

This is precisely why it is important to gradually create opportunities for new, pleasant and stimulating bodily experiences and, in this way, restore a sense of safety, vitality, trust and connection with one's own body. That opportunity is exactly what a well-run sports session provides.

Reduced quality of life

Because of symptoms, fatigue, worry or fear of unpleasant situations, people with IBD sometimes withdraw from social, sporting and recreational activities. Such reduced participation can lead to isolation, reduced satisfaction with life, and the loss of activities that once brought a sense of achievement and connection. Withdrawal deprives us of new opportunities, contacts, deepening relationships, and the learning and sharing that would enrich our lives.

Why this matters to you as an instructor Every one of the five processes above is directly counteracted by well-adapted physical activity. Regular physical activity helps reduce stress and anxiety, improves mood, strengthens the feeling of vitality and trust in one's own body, and increases quality of life. This is why physical activity is an important part of comprehensive health care for people living with IBD. Your session is not a leisure extra, but part of that care.

Movement – the concrete psychological benefits

Research consistently shows that moderate physical activity in people with IBD produces measurable psychological effects. People who are more physically active show fewer symptoms of anxiety and depression and a better quality of life. Each of the mechanisms below has a direct consequence for how you design a session.

Mechanism	What happens	What you can do with it
Reduction of stress and anxiety	Movement activates neurobiological mechanisms that reduce tension and improve emotional regulation. Aerobic activity lowers cortisol. For people already living in a chronic state of physiological tension, this directly breaks the stress–symptoms–stress circle.	Build every session around a rhythm the person can sustain while talking. Intensity that produces distress defeats the purpose.
Improved mood and quality of life	A recent meta-analysis of 21 studies showed that structured physical activity significantly improves mood and quality of life in people with IBD. A daily walk of about twenty minutes can have antidepressant effects through endorphins, serotonin and related neurochemistry. It can also support a sense of control, achievement and contact with others.	Protect the social part of the session. Do not cut the coffee, the chat, the shared walk back.

Restoring trust in the body	One of the deepest losses IBD brings is the loss of the sense that one's own body is reliable. Movement, especially movement that brings success, however small, builds internal evidence that the body can. Every exercise that goes well rewrites the same narrative: "My body is capable."	Design for guaranteed success early. The first three sessions should be things the person will certainly manage.
Emotion regulation	Bodily movement, especially rhythmic and conscious movement (dance, yoga, walking), activates the parasympathetic nervous system, the one that tells us we are safe. This matters particularly for people living in a chronic state of alertness because of unpredictable symptoms.	Include rhythmic, repetitive, breath-linked segments in every session, not only at the end.
Help with fatigue	Psychological fatigue is a state of mental and emotional exhaustion caused by prolonged stress and anxiety. Although it seems that activity will worsen exhaustion, research shows the opposite: even moderate activity reduces the feeling of fatigue over time and increases energy and functionality.	Offer a shorter version of the session rather than accepting cancellation.
Sleep quality	People with IBD often have disturbed sleep, and poor sleep intensifies fatigue, anxiety and brain fog. Regular physical activity is one of the most researched and most effective ways of improving sleep quality, without medication and without side effects.	Mention it. For many participants this is the most motivating single benefit.
Social connection	Group activities, such as a yoga class, a group walk, or an online dance community, provide a sense of belonging that is in itself therapeutic. Social isolation, common in chronic illness, directly worsens depression and anxiety.	Introduce newcomers to one named person, not to "the group".
A sense of control	When the illness is so unpredictable, taking part in an activity becomes one of the few spaces in which the person decides for themselves: what to do, how intensely, for how long. The feeling of personal agency reduces anxiety and increases motivation.	Never remove the choice. Offering options is the intervention.

It is important to emphasise: benefits appear from very small amounts of activity. Fifteen to twenty minutes of light movement three times a week can be enough for changes in mood and stress levels to be noticed. The starting point does not matter. What matters is that it exists.

The two loops

In chronic illness it is easy to fall into a pattern:

Symptom → fear → avoidance → less activity → a drop in self-confidence, mood and energy → still more avoidance and fear

Physical activity can help break that circle:

A small activity → a positive experience → more trust, confidence and energy, better sleep → more activity → greater quality of life

With small initial activities we can interrupt the negative loops and start the positive ones. Note where the leverage sits: at the very beginning, in the smallest possible action. This is an argument for making the first session almost absurdly easy.

Specific effects of particular activities

Yoga - returning to the body without pressure

Yoga is perhaps the most natural introduction to physical activity for people with IBD, because it starts from precisely the opposite place from competition. There is no measure of success, no expectations of others, no deadlines. There is only the body on the mat and the breath that leads the movement.

The psychological mechanisms of yoga are particularly relevant for IBD. Deep diaphragmatic breathing, central to yoga, activates the vagus nerve and calms the sympathetic nervous system. For a person living in a chronic state of physiological alertness, that is the whole point of the practice.

Dance and rhythm - emotional processing through movement

Dance is one of the most personal forms of bodily expression. Precisely for that reason it has a particular psychological power. Unlike many sports, it requires no equipment, no special space and no partner. It can take place in a living room, in half a minute of free time, at exactly the intensity the body can bear that day.

Research in the field of dance and movement therapy shows that dance directly influences emotion regulation, reduces symptoms of depression and anxiety, and helps integrate bodily experience in people with chronic illness. The psychological mechanism is partly cognitive (focus on movement interrupts rumination), partly physiological (rhythm and music activate the dopaminergic system), and partly social (dancing with others builds a sense of community).

Sound and rhythm have privileged access to our nervous system. Percussive rhythm, such as drumming, tapping and knocking, is one of the oldest methods of regulating emotional states in

human communities. Modern neuroscience confirms what various cultures have known for millennia: rhythm synchronises brain activity, reduces stress and creates a sense of community.

For people with IBD, work with percussion or with the rhythm of the body is particularly valuable. It provides an outlet for frustration and tense energy without physical effort that might be excessive. Rhythm is predictable. Predictability calms the anxiety that lives inside an unpredictable illness. And, perhaps most importantly: the body becomes a source of sound, and not only a source of symptoms.

Psychological barriers and how to overcome them

Barrier	What it sounds like	How to work with it
Fear of worsening the disease	"What if exercise triggers a flare?" After severe phases of the illness we may begin to experience our own body as vulnerable and fragile, and unconsciously develop the belief that exertion is dangerous.	Research shows that moderate physical activity is safe for most people with IBD and associated with better quality of life. Encourage the person to consult their doctor to resolve doubts and learn what level is appropriate for their current state. Start below that level.
Lack of information and clear recommendations	"Nobody has ever told me what I am allowed to do." The absence of clear guidance about what to do, how much and how, awakens apprehension and insecurity.	Being informed reduces anxiety and gives a sense of safety and control. Give a written, concrete plan, even a very small one.
Fatigue	"I have no energy for this." Fatigue is a genuine symptom of IBD, but it is sometimes largely psychological in nature. It can be a consequence of mental and emotional exhaustion.	Although it seems we have no energy, a short walk or gentle exercise can sometimes energise and refresh us. Suggest trying a light activity and observing how the body feels: whether alertness and the wish to continue return.
Entrenched habits	"I keep meaning to start." We are largely creatures of habit. Most people, not only those who are ill, want to be more active but struggle to establish regular exercise because it is simply effortful. The brain does not like the effort that building new habits requires.	Tie new habits to existing ones (cycle or walk to work; join a friend straight after a lecture). Use small self-commitment tricks such as paying for a month of classes in advance. Set external reminders. Reduce the number of obstacles: keep shoes and kit permanently packed. Fix a weekly slot with a friend. Mark exercise days on a calendar – we tend to protect a streak.
Shame and insecurity about the body	"I do not want anyone to see me struggling." A feeling of exposure and clumsiness is understandable.	Instead of focusing on appearance or achieving "records", direct attention to the advantages of the process itself: reduced stress, better mood, more energy, pleasant time with others, and enjoyment of the activity.

Movement in everyday life: small movements, large effect

Not all days are equal. Sometimes the illness, the fatigue or the brain fog is so intense that the very thought of “exercising” becomes unreachable. For such days there are micro-activities. These are forms of movement so small that they are almost impossible to refuse, but real enough to send the body and the brain a signal: “I am still here. I am still moving.”

- **Stretching in bed:** immediately on waking, still lying down, stretch the arms and legs. Hold for ten seconds. Done.
- **Standing on one leg while brushing your teeth:** trains balance and proprioception.
- **Gentle rocking in a chair** while watching a series or reading.
- **Five deep breaths** with emphasis on a long exhale – at any moment of the day.
- **A short five-minute walk** – with no goal, without counting steps, just movement.
- **Dancing or tapping to one song** while preparing breakfast.

Each of these micro-steps is important not only physiologically but psychologically: it preserves the narrative that you are a person who moves, even on difficult days. And the narrative we carry about ourselves strongly influences what we will decide to do tomorrow.

Self-motivation

We are more motivated when:

- we have clear values and know why movement is worthwhile for our psycho-physical health and for life as a whole – movement indirectly helps in the process of recovery, control of the disease and prevention of relapse;
- we feel autonomy – that we choose and act of our own free will;
- we feel competence and achievement – developing skills and a sense of mastery motivate us intrinsically;
- we recognise and celebrate small victories – share them freely, because sharing reinforces and commits;
- we plan and realise meaningful activities – this restores a sense of control and self-confidence;
- we nurture optimism – looking realistically at the situation, staying calm and focused on what we can control;
- we choose rhythmic activities – neuroscience shows that repetitive, rhythmic activities stimulate reward centres and create a feeling of satisfaction;
- we develop a growth mindset – it is not a matter of talent but of practice and persistence; grit and a developmental mindset contribute to commitment to goals;
- we see positive examples of others – “If they can, so can I”;

- we nurture small joys – research shows that happiness comes from a series of small positive experiences; find something pleasant in physical activity every day: a favourite song, a walk with a friend, throwing a frisbee at a gathering.

“I never have the motivation to exercise – I go and exercise, and then the motivation comes.”

Stigma – what it is and where it comes from

Stigma around IBD has three distinct sources, and each requires a different response.

Type of stigma	How it operates	Antidote
The taboo of the subject	Bowel function is culturally embarrassing. People will describe a knee injury in detail and say nothing about the symptom that actually governs their life.	Speak about toilet access matter-of-factly, in the same tone as you speak about drinking water. Normalisation begins with the instructor's own voice.
Invisibility	Because nothing is visible, adaptations look like privileges and absences look like a lack of commitment.	Make adaptation universal (see 3.8) so that no one has to justify it.
Internalised stigma	The person adopts the judgement themselves: “I am unreliable”, “I am a burden to the group”.	Consistent, undramatic welcome on return. What is said after an absence matters more than anything said before it.

Creating a safe, supportive and non-judgemental environment

If you lead yoga, dance, fitness or any form of group activity and you have a person with IBD among your participants, you can make a great difference with simple adaptations.

Normalise adaptation

Instead of offering a person with IBD an “exception”, build a culture in which adaptations are an integral part of every session: “Each of you today chooses the intensity that suits your body.” That sentence is equally honest for everyone, and for a person with IBD it is an invaluable gift.

Guarantee toilet access without stigma

Say it at the beginning of the class: “If anyone needs to step out at any moment – go ahead, no need to ask.” That simple sentence can be the difference between whether a person with IBD comes back next week at all.

Avoid comments that assume equal capacity

To a person who could barely get out of bed yesterday, “everyone can make it to the end if they try” sounds like an accusation. Ask instead: “How are you today? Let’s find the pace that works.”

Be informed, but do not take on the role of therapist

It is enough to know that the condition is variable and invisible, and that symptoms come and go without warning. You do not need the diagnosis in order to adapt. Believe the person when they tell you how they feel.

Celebrate small victories out loud

"You showed up today – that is something." When said sincerely, this can be the most important thing someone with IBD hears that week.

Language: a working table

Instead of	Say	Why
"Are you all right? You look pale." (in front of the group)	Nothing in front of the group. Later, quietly: "Anything you need from me today?"	Public attention to symptoms is the single most reliable way to lose a participant.
"Come on, push through it."	"Take the version that works for your body right now."	Pushing through is precisely the behaviour that produces harm here.
"But you look so healthy!"	"Thanks for telling me. What would help?"	Invisibility is already the problem; do not reinforce it.
"My cousin cured it with a diet."	Nothing. Not a word about treatment.	Unsolicited medical advice is experienced as an accusation of not trying hard enough.
"You missed three sessions. You will have to catch up."	"Good to see you. We are doing X today; take whichever level suits."	Return must be frictionless or it will not happen.
"Do not worry, I will keep an eye on you."	"You know your body best. Tell me what you need and I will set it up."	Protection offered without being asked reads as pity and removes agency.
"Is that because of your illness?"	"No problem. Join back in whenever you are ready."	Never require an explanation for an absence or an exit.

Empathy without pity

The distinction between empathy and pity decides whether a person stays in your group. Pity positions the other person as diminished and the helper as intact. Empathy positions both as competent adults, one of whom happens to hold information the other needs.

Pity	Empathy
Lowers expectations pre-emptively.	Offers options and lets the person choose the level.
Speaks about the person to others ("she has that bowel condition").	Speaks only with the person, and only about what they raised.
Praises the person for existing ("you are so brave").	Praises specific, real progress ("your balance on that side is much better").
Makes exceptions visibly, for one person.	Makes adaptation standard, for everyone.
Reacts to a difficult day with alarm.	Reacts to a difficult day with a plan.
Focuses on the illness.	Focuses on the movement.

The closing thought of this chapter Movement is the right of every body: in the form that suits it, at the rhythm it can afford, in a way that respects it. For a person with IBD, taking part in movement is proof that the person is more than the illness. There is a part of them that decides, moves and finds joy, even in a space bounded by symptoms. There is no perfect activity. What matters is finding a form of movement that suits you: yoga that lasts five minutes, two minutes of free dance in the living room, tapping a rhythm on the knees, a short walk to the corner. All of these are forms of the same idea. The body is here, the body works, the body deserves attention and care.

ADAPTING THE TRAINING PROCESS

In this section, the methodological and operational criteria for adapting training and motor activities to the specific needs of patients suffering from Inflammatory Bowel Disease (IBD/MICI) are defined. The primary objective of the sports instructor is not absolute competitive performance, but the creation of a personalized, safe, and flexible motor path capable of fostering inclusion and psychophysical well-being.

Methodological guidelines for self-regulation

Factors of adapted motor performance: what to teach

Motor activity does not change in its biological components, but it changes radically in its calibration. A patient with IBD frequently lives with abdominal pain and chronic fatigue (a systemic fatigue not related to physical exertion).

Basic motor skills (walking, running, jumping, crawling, rolling, climbing, throwing, and catching) and **postural patterns** (referring to the postures or movements that the different parts of the body assume, maintain, or perform in space; e.g., bending, flexing, circumducting, tilting, rotating, abducting, adducting, swinging): They must be proposed by reducing the biomechanical impact. For example, intensive “jumping” or “running” can generate repeated stresses and micro-traumas at the pelvic and abdominal level, increasing discomfort or urgency anxiety. The instructor will prefer fluid motor patterns, linked to the control of the center of gravity, postural stability, and relaxation.

General and special coordination abilities (motor learning, control, balance, spatio-temporal orientation, rhythm, kinesthetic differentiation abilities): They are the primary objective. Developing balance and the perception of one's body in space helps the patient recover confidence in their physical capabilities, stimulating the nervous system without overloading the digestive system or exhausting energy reserves.

Conditional abilities (strength, endurance, joint mobility):

- **Strength:** focus on endurance strength and core stabilization, avoiding excessive increases in endo-abdominal pressure, such as when performing the Valsalva maneuver or maximal efforts in apnea, which can accentuate intestinal symptoms.
- **Endurance:** exclusively aerobic at moderate or mild intensity, useful for promoting the systemic anti-inflammatory action of sports.
- **Joint mobility:** fundamental for lengthening muscle chains that are often contracted due to antalgic postures, assumed spontaneously by the body to reduce or avoid pain.

How to teach: teaching methods and flexibility

The variability of the pathology requires the transition from rigid teaching to a fluid and personalized pedagogy.

- **Deductive methods (directive):** useful in the initial stages of learning a technical gesture (e.g., correct posture in Nordic Walking or the use of safety devices in climbing). The instructor guides the movement step-by-step to ensure maximum biomechanical safety.
- **Inductive methods (guided discovery, free exploration, problem-solving):** must represent the heart of the lesson. Placing the patient in front of a motor task to be solved freely (e.g., “find your way to overcome this path while maintaining contact with the ground” or “choose the walking pace that allows you to speak without breathlessness”) allows self-regulation. The patient learns to listen to the messages of their own body, modulating exertion based on the symptoms of the moment without feeling “behind” compared to the instructor's program.

Lesson management and warm-up (mental and physical warm-up)

The initial moment of the session is crucial: for the IBD patient, entering the gym or the field is often accompanied by performance anxiety and the fear of having to abandon the lesson due to an urgency. The warm-up must therefore act simultaneously on the mind and body.

Modulation of arousal and psychic energy

The instructor must create a protected and judgment-free environment. The warm-up serves to achieve the ideal level of energy and concentration, thus optimizing psychophysical activation (arousal), transforming negative stress deriving, for example, from performance anxiety, into positive energy, increasing body awareness and lowering cortisol levels.

Examples of operational and practical exercises to propose in the first 15 minutes

Aerobic and relational activation (low impact):

- **The synchronized pace:** free walking in space at progressive intensity. At the instructor's signal, participants temporarily pair up with a companion, synchronizing their pace and respiratory rhythm, and then separate. This exercise promotes socialization and diverts attention from internal anxiety.
- Synchronization of breath with steps (e.g., inhale every 3 steps, exhale for another 3).

Respiratory synchronization and abdominal control:

- **Wave breathing (lying down or seated):** hands on the abdomen. Inhale by gently expanding the belly, exhale by emptying it completely and relaxing the shoulders. This exercise stimulates the vagus nerve, reduces visceral discomfort, and acts as an “anchor” against abdominal stress.

Conscious muscle contraction and relaxation (adapted Jacobson method):

Tension points: isolate one muscle group at a time following this fixed 3-phase scheme:

- **Phase 1: contraction (5 seconds):** ask to clench fists and contract arms to the maximum of their strength. Count mentally to 5.
- **Phase 2: immediate release:** give the command to “let go” suddenly. They must not accompany the movement; they must drop it completely at once.

- **Phase 3: listening (10 seconds):** focus attention on the physical sensation. They will feel their arms warmer, heavier, and more relaxed thanks to the blood flowing freely again.

Body progression: repeat the exact same sequence (contract for 5 seconds, let go suddenly, listen) moving to other muscle groups, one at a time:

- **Shoulders:** bring them up towards the ears, squeeze, and then let go.
- **Glutes:** squeeze them hard as if having to hold something, and then let go.
- **Calves:** push feet forward or pull toes upward to contract them, and then let go.
- **Abdomen:** the abdomen must be treated differently to avoid blocking the breath. Ask to take a deep breath, hint at a barely hard belly (a minimal, “very light” tension), and then exhale completely, leaving the belly entirely soft and relaxed.

Training adaptations for 10 selected sports

The selected motor activities are structured on the field through a regulation system based on three levels of intensity, identified by specific colors, which the instructor verifies with the participant before the start of each session².

GREEN – remission	Stable clinical condition and absence of significant symptoms. It is possible to work on the medium-to-long term and on the development of muscle tone and aerobic endurance.
ORANGE – mild/moderate flare	Presence of active inflammation, generalized fatigue, or visceral discomfort. Activities are scaled down to low impact, focusing on gentle maintenance, mobility, and stress reduction.
RED – critical / post-surgery	Delicate phase that requires maximum biomechanical protection of the abdominal wall. Activity is strongly reduced in duration and focused exclusively on passive mobility, breathing, and relaxation postures, excluding significant physical efforts.

Kako se proverava radi u praksi

- Ask once, at the start, quietly, in the same words every time: “Green, orange or red today?”
- Accept the answer without discussion. It is a self-report, not a negotiation.
- The level can change mid-session. Say so explicitly at the beginning of the course: “If you start green and drop to orange halfway through, just switch. No need to tell me.”

Never ask why. The colour is the whole message. Crveno nikada nije nula: i na crvenom postoji varijanta. Osoba koja je na crvenom, a došla je, uvek treba da ima šta da radi.

²Annex B.2 – Session card. One card per session, filled in before it starts; it records the colour level and the adaptation applied.

Operational sheets for the BOOST sport disciplines

Each sheet follows the same structure: regulatory status in the three partner countries, educational objectives, and the three self-regulation variants. The sheets are working documents: they are meant to be printed, annotated and adapted to the local club, facility and group. The participant-facing version of these disciplines is given in the BOOST guide for people with Inflammatory Bowel Disease. It explains what each sport involves and what it offers the person practising it.

OPERATIONAL SHEET N. 1: SPORT CLIMBING

Regulatory status

- **IT:** managed within FASI (Italian Sport Climbing Federation), recognised by CONI and including the Paraclimbing sector (in coordination with the CIP – Italian Paralympic Committee). Indoor practice through affiliated climbing gyms.
- **RS:** included under the aegis of PSS (Planinarski savez Srbije) and its sport climbing commission, alongside climbing clubs operating indoor walls.
- **HR:** managed within HPS (Croatian Mountaineering Association) and its sport climbing commission, with practice in affiliated climbing centres.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Development of body awareness in an unusual spatial orientation; problem-solving through movement; grip and core endurance strength; restoration of trust in the body through graded, verifiable success; management of controlled arousal in a protected setting.

Self-regulation variants

GREEN – remission	Complete top-rope or lead sessions on easy to moderate routes, with progressive volume. Technique work on footwork, hip positioning and reading the route. Bouldering at low height with mats, avoiding dynamic movements and drop landings.
ORANGE – mild/moderate flare	Top-rope only, on vertical or slabby routes with large holds, at conversational effort. Reduced number of routes with long rests. Belaying, route reading and coaching a partner are full participation – not a lesser option. Avoid overhangs, lock-offs and any prolonged apnea.
RED – critical / post-surgery	No climbing on the wall. Total prohibition of hanging, lock-offs and any loading of the abdominal wall. Participation through ground-level activities: balance and proprioception on low beams or floor tape, hand and forearm mobility, knot practice, belay theory, breathing and relaxation with the group.

Instructor's note. Climbing is unusually strong at rebuilding trust in the body, because progress is unambiguous and visible. Use that: log completed routes, not attempts. Note that bouldering falls are the main risk element for participants with reduced bone density. Prefer top-rope.

OPERATIONAL SHEET N. 2: NORDIC WALKING

Regulatory status

- **IT:** managed within FIDAL (Italian Athletics Federation) and methodologically promoted by the Italian Nordic Walking School (SINW).
- **RS:** officially included under the aegis of PSS (Planinarski savez Srbije) as a hiking discipline linked to well-being and active trails.
- **HR:** promoted through HAS (Croatian Athletics Federation) for walking aspects and integrated into the outdoor activities of HPS (Croatian Mountaineering Association).

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Development of alternate coordination, enhancement of aerobic endurance, improvement of posture and joint unloading of the lower limbs thanks to the use of poles.

Self-regulation variants

GREEN – remission	Complete technique with active push of the pole and opening of the hand behind the pelvis. Medium-long duration routes in natural environments.
ORANGE – mild/moderate flare	Walking at a natural pace reducing the intensity of the arm push to prevent early fatigue. Exclusively flat routes with regular ground, short sessions with frequent active recovery pauses.
RED – critical / post-surgery	Use of poles solely as a support and stability aid to unload weight, eliminating the propulsion component. Very short sessions on flat and protected ground, with a focus on posture and mobility.

Instructor's note. Route design is the real adaptation here. Plan loops rather than out-and-back lines, so that the distance from the start and from a toilet never exceeds what the participant has agreed to.

OPERATIONAL SHEET N. 3: HIKING

Regulatory status

- **IT:** organised through CAI (Italian Alpine Club) and its sections, and through FIE (Italian Hiking Federation) for marked-trail and excursion activity.
- **RS:** organised under PSS (Planinarski savez Srbije) and its member clubs, as the core discipline of the federation.
- **HR:** organised under HPS (Croatian Mountaineering Association) and its member societies.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Aerobic endurance built at self-selected pace; adaptation of gait to irregular terrain and consequent proprioceptive gain; exposure to natural environment with documented effects on mood and sleep; group belonging without competitive comparison.

Self-regulation variants

GREEN – remission	Full tours on varied terrain with moderate ascent, medium-long duration, carrying a light personal pack. Progression by duration first, then by ascent.
ORANGE – mild/moderate flare	Flat or gently undulating local routes of 30–45 minutes on regular ground, organised as short loops. Frequent stops presented as group stops. No pack weight beyond water; turnaround point agreed before departure.
RED – critical / post-surgery	Very short level walk on a paved or protected path close to facilities, or accompanying the group to a viewpoint reached by vehicle. No ascent, no pack, no distance from a toilet beyond what the participant has agreed.

Instructor's note. The adaptation in hiking is made at the planning table, not on the trail. Publish the route profile, the position of every hut, café or shelter, the turnaround point and the shortened alternative before the outing. Present the shortened route as a normal option rather than the failure option.

OPERATIONAL SHEET N. 4: SILAT SUFFIAN BELA DIRI – SSBD (MARTIAL ART)

Regulatory status

- **IT:** framed within the sector of traditional non-competitive martial arts within Sports Promotion Bodies recognized by CONI or inside specific sectors of official Federations.
- **RS:** framed within SAMS (Martial Arts Association of Serbia) or registered through independent clubs focused on traditional self-defense and well-being biomechanics.
- **HR:** registered as a traditional martial art traditionally not oriented towards sports combat under the general supervision of the Croatian Ministry of Tourism and Sport.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Control of the center of gravity through fluid movements; increase in eye-hand coordination; optimization of the use of skeletal structures to reduce muscular effort.

Self-regulation variants

GREEN – remission	Study of movement geometries (footwork) and level changes at normal intensity. Collaborative pair exercises for deflections and basic joint levers.
ORANGE – mild/moderate flare	Practice focused on pure structural biomechanics and executed at very low speed, eliminating any impact or sudden acceleration. Avoiding techniques requiring deep bending or sudden twisting of the spine.
RED – critical / post-surgery	Work focused exclusively on postural principles of body axis and grounding, executable also while seated or with stable support. Analytic study of deflections using only the upper limbs. Total prohibition of experiencing or applying throws, levers, or physical pressure.

Instructor's note.For participants with a stoma, contact of any kind with the abdominal region is excluded at all three levels. Pair work should be assigned with a partner who has been briefed on this by the participant themselves, never by you.

OPERATIONAL SHEET N. 5: FITNESS AND MOBILITY (FUNCTIONAL TRAINING)

Regulatory status

- **IT:** delivered in gyms and within Sports Promotion Bodies recognized by CONI, by qualified fitness technicians.
- **RS:** delivered through fitness centres and recreational sport associations, by licensed trainers.
- **HR:** delivered through fitness centres and recreational associations, by licensed trainers.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Building and preserving muscle mass lost during flares, hospitalisation and corticosteroid therapy; protection of bone density through weight-bearing load; improvement of everyday function such as carrying, climbing stairs, getting up from the floor; joint protection and reduction of stiffness.

Self-regulation variants

GREEN – remission	Full-body sessions two to four times per week: 5 minutes mobility warm-up, about 20–40 minutes main part with two to three sets per exercise, 5–10 minutes stretching. Load progressed by approximately 5–10% per week, never to muscular failure.
ORANGE – mild/moderate flare	Session reduced to mobility, bodyweight movement and gentle stretching. Elimination of exercises that significantly increase intra-abdominal pressure, of maximal effort in apnea and of the Valsalva manoeuvre. One set instead of two; longer rests; the session may be halved without being considered incomplete.
RED – critical / post-surgery	Breathing and gentle passive mobility only, seated or supine. No abdominal exercises, no planks, no lifting. Circling of ankles, wrists, shoulders and neck; supported hip and thoracic mobility; long-exhale breathing.

Instructor's note. This is the discipline where the temptation to over-programme is greatest, because progress is measurable. Resist it: mild delayed-onset muscle soreness is normal, pain in a joint is not, and a training log that records symptoms alongside load is more useful here than one that records only weight.

OPERATIONAL SHEET N. 6: LAUGHTER YOGA

Regulatory status

- **IT:** non-competitive bio-natural and well-being discipline, promoted by the National Laughter Yoga Association and framed within the wellness activities of Sports Promotion Bodies recognized by CONI.
- **RS:** framed as a holistic discipline and well-being activity (joga smeha) within associations for public health and citizen well-being.
- **HR:** recognized as a holistic and relaxation technique (joga smijeha) included in wellness and stress management programs, operating via local clubs.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Reduction of stress levels through hormonal regulation; increase in cellular oxygenation through deep yogic breathing; group cohesion and overcoming isolation.

Self-regulation variants

GREEN – remission	Participation in the complete session including rhythmic warming up with clapping, laughter exercises, and final guided relaxation.
ORANGE – mild/moderate flare	Modified session reducing dynamic movements in space. In breathing phases, avoid holding the breath for a long time (apnea) to not increase endo-abdominal pressure. Laughter is modulated as an amplified smile if convulsive belly laughter causes discomfort.
RED – critical / post-surgery	Practice aimed solely at psychophysical relaxation and carried out entirely while seated or in a position of maximum comfort. Forced abdominal contractions are forbidden. Focus on the breathing component and light clapping.

Instructor's note. Sustained belly laughter is a genuine abdominal contraction. Say at the start that “the smile version counts exactly as much as the laugh version”. Otherwise participants will force it and pay for it afterwards.

OPERATIONAL SHEET N. 7: YOGA

Regulatory status

- **IT:** non-competitive bio-natural discipline, delivered by qualified teachers within Sports Promotion Bodies recognized by CONI and by professional yoga associations.
- **RS:** delivered through yoga studios and associations; framed as a holistic well-being and recreational activity.
- **HR:** delivered through licensed studios and associations as a recreational and wellness activity.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Synchronisation of breath and movement; activation of the vagus nerve and parasympathetic system through diaphragmatic breathing; joint mobility and lengthening of chains contracted by antalgic posture; interoceptive awareness without performance pressure.

Self-regulation variants

GREEN – remission	Complete practice: breathing, standing sequences, balance postures, gentle backbends and twists, closing relaxation. Progressive strengthening of the abdominal wall is permitted when there is no surgical restriction.
ORANGE – mild/moderate flare	Restorative practice only. Elimination of intense styles (power, hot), strong abdominal work, deep twists and inversions. Long holds with props, seated and supine mobility, extended exhale breathing. Duration reduced; the mat is never left before the closing relaxation.
RED – critical / post-surgery	Entirely supported practice: supine or seated, with bolsters, blocks and a wall. Breathing with a long, unforced exhale; passive mobility of the extremities; guided body scan. No abdominal engagement, no breath retention, no prone positions pressing on the abdomen.

Instructor's note. After abdominal surgery, do not load the abdominal wall until the doctor approves it. This includes plank, boat, deep twists and prone backbends. If a participant has a stoma, avoid prone postures and any belt or strap across the stoma site.

OPERATIONAL SHEET N. 8: BIODANZA

Regulatory status

- **IT:** motor integration system framed among non-competitive bio-natural disciplines, promoted by BIOITA and certified schools, included in wellness activities of Sports Promotion Bodies recognized by CONI.
- **RS:** framed as a holistic discipline, bodily expression, and activity for psychophysical and social well-being within independent associations.
- **HR:** recognized as an integrative method for stress reduction and promotion of relational health in the wellness and psychosocial support sector.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Motor-affective integration and stimulation of organic self-regulation; reduction of chronic stress through the modulation of the autonomous nervous system; release of muscle tension at the abdominal and pelvic levels; improvement of quality of life through group empathy.

Self-regulation variants

GREEN – remission	Participation in the complete session including rhythmic walks, activation and coordination dances, creative expression exercises, and final deep relaxation dances (parasympathetic activation).
ORANGE – mild/moderate flare	Limitation of movements requiring sprints, jumps, or intense cardiovascular activation. Movements are executed at a slow and fluid rhythm, shifting the focus to awareness, muscle relaxation, and light empathetic contact.
RED – critical / post-surgery	Practice aimed exclusively at self-care and affective stimulation, carried out entirely while seated. Sudden movements, torso twists, or abdominal flexions are forbidden. The work focuses on intimate fluidity dances of the extremities (hands, arms, shoulders), breathing integrated with music, and long-distance relational connection via gaze.

Instructor's note. Biodanza involves consensual physical contact. Before the first exercise, communicate the rule to the entire group: contact is always optional, declining requires no justification, and participating through eye contact alone is already a complete form of inclusion. The invitation to self-regulate must be constant, as it is an integral part of learning the practice.

OPERATIONAL SHEET N. 9: TABLE TENNIS

Regulatory status

- **IT:** managed within FITeT (Italian Table Tennis Federation), recognized by CONI and by CIP, with recreational and para-table-tennis sections.
- **RS:** managed within STSS (Table Tennis Association of Serbia) and its member clubs, with recreational sections.
- **HR:** managed within HSTS (Croatian Table Tennis Association) and its member clubs, with recreational sections.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Reactive coordination and eye-hand differentiation; spatio-temporal orientation; moderate aerobic load in short intermittent bursts matched to fluctuating energy; social interaction with no physical contact.

Self-regulation variants

GREEN – remission	Full recreational play, singles or doubles, 30–60 minutes with light warm-up and closing stretch. Introduction of tactical and technical progression; club or league play for the social component.
ORANGE – mild/moderate flare	Short rallies with cooperative rather than competitive intent, 15–20 minutes, focusing on technique rather than winning. Doubles preferred, so the load is shared. Reduce lateral lunging and rapid direction changes.
RED – critical / post-surgery	Seated or standing-supported play against a partner feeding predictable balls, or multiball at a table edge with no lateral movement. Very short duration. Alternatively, participation through scoring, coaching or ball feeding.

Instructor's note. Table tennis is indoor, year-round, close to facilities and involves no physical contact. This makes it one of the most accessible entry points in this manual for people with a stoma. The intermittent structure (short bursts with natural breaks) matches fluctuating energy better than continuous sports.

OPERATIONAL SHEET N. 10: SWIMMING

Regulatory status

- **IT:** managed within FIN (Italian Swimming Federation), recognized by CONI, and within FINP (Italian Paralympic Swimming Federation), recognized by CIP, with recreational, adapted, and paralympic sectors.
- **RS:** managed within the Swimming Federation of Serbia (Plivački savez Srbije) and its member clubs.
- **HR:** managed within the Croatian Swimming Federation (Hrvatski plivački savez) and its member clubs.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Whole-body conditioning with buoyancy fully offloading joint stress – particularly relevant where extraintestinal joint manifestations are present; cardiovascular endurance; the calming effect of immersion; intensity and duration adjustable in very fine increments.

Self-regulation variants

GREEN – remission	Sessions of two to three times per week, with varied strokes for balanced muscle engagement, session length increased by about five minutes every one to two weeks.
ORANGE – mild/moderate flare	Ten to fifteen minutes at an easy pace, breaststroke or backstroke, with rest at the pool edge whenever needed. Lane choice closest to the exit. No sets, no timing, no distance targets.
RED – critical / post-surgery	No swimming. Optionally, and only with medical clearance, walking in a shallow warm pool for a few minutes with a handrail available. Otherwise dry-land breathing and mobility.

Instructor's note. Chlorinated water can irritate the skin and the gut in some people; a pool with an alternative purification system is worth seeking if that occurs. Swimming in pools, lakes and the sea is not advised in the presence of active perianal disease because of the increased risk of local infection. This is one of the few absolute exclusions in this manual.

Additional discipline sheets

Sheets 1 to 10 cover the ten BOOST selected disciplines. The sheets below extend the same framework to the other activities described in this guide, so that an instructor working in any of them has the self-regulation variants available in the same form.

OPERATIONAL SHEET N. 11: RHYTHM AND PERCUSSION

Regulatory status

- **IT:** expressive and bio-natural well-being discipline (“percussioni e ritmo”), delivered through cultural and music associations and within the wellness sections of Sports Promotion Bodies recognized by CONI.
- **RS:** framed as a group expressive and well-being activity (ritam i perkusije) within cultural-artistic and public-health associations.
- **HR:** recognized as a group expressive, relaxation and stress-management technique (ritam i perkusija), delivered through cultural associations and wellness programmes.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Synchronisation of group and individual rhythm; regulation of the autonomic nervous system through predictable repetitive stimulus; release of tension and frustration without significant physical load; restoration of the body as a source of expression rather than of symptoms; social cohesion through non-verbal communication.

Self-regulation variants

GREEN – remission	Complete session: standing rhythmic warm-up with body percussion, drumming in ensemble with progressive polyrhythms, call-and-response improvisation, and closing group synchronisation. Standing play and stepping to the pulse are included.
ORANGE – mild/moderate flare	Seated play throughout, with reduced volume and duration. Slower tempi and simple, predictable patterns. Elimination of large-amplitude arm movements and of standing stepping sequences. Frequent pauses; the participant may drop to listening and re-enter at any point.
RED – critical / post-surgery	Practice reduced to minimal-effort expression, entirely seated and supported. Light hand percussion on the thigh, table or a small frame drum held by a stand. No sustained arm elevation, no torso rotation, no forced breathing patterns. Focus on listening, following the group pulse, and slow breath entrained to the rhythm.

Instructor's note. Rhythm is one of the few activities in this manual that is genuinely full participation at RED level. A person at red can hold the pulse for the whole group. This is a role of high status, not a concession. Use it.

OPERATIONAL SHEET N. 12: POLE SPORT

Regulatory status

- **IT:** athletic-fitness discipline framed within Sports Promotion Bodies recognized by CONI and within federations and associations of pole sport.
- **RS:** delivered through specialised studios and clubs as a recreational-fitness discipline.
- **HR:** delivered through specialised studios; framed within recreational fitness and dance-sport structures.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Whole-body strength with emphasis on grip, shoulder girdle and stabilising musculature; spatial intelligence and body-in-space awareness; sustained focused attention as an interruption of rumination; progressive, clearly measurable achievement.

Self-regulation variants

GREEN – remission	Complete session: warm-up combining yoga, pilates and fitness principles; floor work; spins; climbing, once grip and abdominal wall are ready. Inverted elements only after several months of building strength, and only when the instructor judges the participant ready.
ORANGE – mild/moderate flare	Warm-up and conditioning section only, at reduced load. Floor work and low-height spins with both feet available to the floor. No climbing, no hanging, no inverted work, no maximal grip holds. Sessions shortened, with long rests.
RED – critical / post-surgery	No pole contact. Participation through seated and supported mobility of wrists, shoulders and thoracic spine, and through observation and technical study. No grip loading, no hanging, no abdominal work of any kind.

Instructor's note. Pole sport loads the abdominal wall more than almost any other discipline in this manual. After abdominal surgery there is no climbing, hanging or intense abdominal work until the surgeon approves it. Note also that skin contact is what holds the body on the pole, so minimal clothing is required. For a participant with a stoma or abdominal scarring, this is a significant exposure question that must be addressed privately before the first session.

OPERATIONAL SHEET N. 13: RUNNING AND TRAIL RUNNING

Regulatory status

- **IT:** managed within FIDAL (Italian Athletics Federation), including its trail running sector; recreational running within Sports Promotion Bodies recognized by CONI. Recognized by CONI and by CIP through FISPES (Italian Federation of Paralympic and Experimental Sports) and FISDIR for adapted and paralympic athletics.
- **RS:** managed within the Athletics Federation of Serbia (Atletski savez Srbije); trail and mountain running also linked to PSS.
- **HR:** managed within HAS (Croatian Athletics Federation); trail running also linked to HPS.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Moderate aerobic conditioning associated with reduced systemic inflammation; regulation of bowel transit through moderate rhythmic activity; mood improvement and anxiety reduction; a low-equipment habit that fits into an ordinary day.

Self-regulation variants

GREEN – remission	Continuous running of 20–30 minutes at a conversational pace on familiar routes, progressing to softer trail surfaces. Intervals only after continuous endurance is established, and never to maximal effort.
ORANGE – mild/moderate flare	Run-walk method only – for example one minute of light jogging and two minutes of walking, for a total of about 20 minutes. Flat, familiar loop close to a toilet. No intervals, no pace targets, no distance targets.
RED – critical / post-surgery	No running. Walking at a comfortable pace for a few minutes, or complete rest with mobility and breathing work. Impact loading is excluded entirely.

Instructor's note. Running is the discipline in this manual with the highest risk of the participant self-prescribing too much, because progress is easy to measure and the culture rewards volume. Cap intensity explicitly, use the talk test as the only pace instrument, and treat any new blood in the stool after running as a stop-and-refer signal.

OPERATIONAL SHEET N. 14: CYCLING AND STATIONARY BIKE

Regulatory status

- **IT:** managed within FCI (Italian Cycling Federation), recognized by CONI and by CIP for the paracycling and adapted cycling sector; indoor cycling is also delivered within gyms and Sports Promotion Bodies recognized by CONI.
- **RS:** managed within the Cycling Federation of Serbia (Biciklistički savez Srbije) and its member clubs.
- **HR:** managed within the Croatian Cycling Federation (Hrvatski biciklistički savez) and its member clubs.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Cardiovascular conditioning with minimal joint impact; fully controllable resistance and duration; the indoor variant removes the toilet-access constraint entirely, which makes it one of the few disciplines available on unpredictable days.

Self-regulation variants

GREEN – remission	Outdoor rides on flat, familiar routes with toilet access planned; duration extended before resistance. Short higher-power intervals only once basic endurance is established. Ride log kept (duration, terrain, symptoms).
ORANGE – mild/moderate flare	Stationary bike only, in an upright position with the handlebars raised to reduce forward lean and abdominal compression. Low resistance, 10–15 minutes, with the option to stop at any point.
RED – critical / post-surgery	No cycling. The seated position, saddle pressure and forward lean are all excluded. Replace with supine or seated passive leg mobility and breathing work.

Instructor's note. Two specific cautions. First, prolonged forward lean raises abdominal pressure. Adjust the saddle and handlebars before adjusting the workout. Second, cycling is not advised in the presence of perianal disease at any level, because of the mechanical effect of the seated position; offer an alternative discipline rather than a reduced version.

OPERATIONAL SHEET N. 15: KARATE (Martial Art)

Regulatory status

- **IT:** managed within FIJLKAM (Italian Federation of Judo, Wrestling, Karate and Martial Arts), recognized by CONI and by CIP for the parakarate and adapted martial arts sector; practice is also delivered within Sports Promotion Bodies recognized by CONI.
- **RS:** managed within the Karate Federation of Serbia (Karate federacija Srbije) and its member clubs.
- **HR:** managed within the Croatian Karate Federation (Hrvatski karate savez) and its member clubs.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Muscular strength, coordination and breath control within a structured technical system; meditative elements (kime, breath control) as stress regulation; a belt progression that allows pacing matched to individual capacity; restored sense of control over the body.

Self-regulation variants

GREEN – remission	Full beginner programme: kihon (basic technique) and kata, with endurance and conditioning segments. Controlled contact exercises introduced gradually, and only with the agreement of both the gastroenterologist and the instructor.
ORANGE – mild/moderate flare	Kihon and kata only, at reduced speed and with shallower stances. No contact of any kind, no kumite, no impact. Session shortened, with the technical rather than the conditioning content retained.
RED – critical / post-surgery	Seated or standing-supported technical study: hand technique, breathing, kime without contraction of the abdominal wall. No stances, no impact, no partner work.

Instructor's note. Contact training and strikes to the abdominal area are excluded during an active flare at every level. For a participant with a stoma, abdominal contact is excluded permanently. Kata-based practice remains fully available, and a club that treats kata as the real curriculum rather than as preparation for kumite will retain such participants.

OPERATIONAL SHEET N. 16: BOWLING

Regulatory status

- **IT:** managed within FISB (Italian Bowling and Skittles Federation), recognized by CONI, with a large recreational and adapted sector.
- **RS:** organised through bowling centres and the Bowling and Skittles Association of Serbia, predominantly recreationally.
- **HR:** organised through bowling centres and the Croatian Bowling Federation, predominantly recreationally.

Note: in all three partner countries, the activity is applied exclusively in an inclusive, adapted, and wellness key, excluding high-impact competitive sports.

Educational objectives

Moderate engagement of arms, legs and trunk in short bursts with natural recovery between throws – a structure that matches fluctuating energy better than continuous activity; a strong social component in a controlled indoor space with immediate toilet access.

Self-regulation variants

GREEN – remission	One or two full games, with a warm-up of arms and shoulders beforehand. Progression to group or league play for the social component. Regular weekly session.
ORANGE – mild/moderate flare	One short game with the lightest comfortable ball, seated between throws, with the option to end early without finishing the frame. Technique rather than score.
RED – critical / post-surgery	Participation without throwing: keeping score, coaching, or simply being present with the group. A small number of very light throws only if the participant wishes.

Instructor's note. Bowling scores unusually well on the environmental criteria in Chapter 5: indoor, temperature-controlled, toilets within seconds, and no time pressure. This makes it a good first activity for someone who has withdrawn from sport entirely. The physical caution is the shoulder and back, not the abdomen: repeated throwing accumulates load quickly.

Creating flexible training plans (timing, intensity)

A flexible plan is not a vague plan. It is a plan with the same clarity as any other, in which the variable elements are declared in advance rather than improvised under pressure. Three parameters do almost all the work: when the session happens, how intense it is, and how the person is allowed to leave and return.

Timing

- **Time of day.** Symptoms in IBD often follow a daily pattern, and for many people mornings are the least predictable. Ask each participant when their energy is at its best and, where the schedule allows, train then.
- **In relation to meals.** Avoid a heavy meal two to three hours before activity; a light meal at least an hour before is a common compromise. Exercising soon after eating is a frequent trigger of symptoms.
- **In relation to therapy.** Where a participant receives infusion therapy on a schedule, expect one or two lower-capacity days afterwards and plan demanding sessions away from them.
- **Session length.** Publish sessions as a range – “45–60 minutes” – and always announce the actual end time at the start. Not knowing when a session will end is a significant anxiety trigger.
- **Weekly structure.** Two anchor sessions plus one optional session works better than three obligatory ones. A missed optional session is a normal week; a missed obligatory session is a failure, and failure predicts dropout.

Intensity

Intensity must be defined by internal sensation, not by external numbers, because external numbers assume a stable baseline that IBD does not provide. Two simple instruments cover almost every case.

Instrument	How it works	Target for IBD
The talk test	The participant should be able to speak a full sentence comfortably while moving. If they can only manage single words, they are above the target zone.	Full sentences at GREEN and ORANGE. At RED, no aerobic target at all.
Perceived exertion (RPE 1–10)	The participant rates their own effort from 1 (sitting) to 10 (maximal).	GREEN: 4–6. ORANGE: 2–4. RED: 1–2.
The next-day rule	If a session leaves the participant more fatigued the following day than before it, the dose was too high, regardless of how it felt at the time.	Applies at every level and overrides both instruments above.

Two absolute intensity limits, at every level

- No Valsalva manoeuvre and no maximal effort in apnea – both raise intra-abdominal pressure sharply.
- No high-intensity work during an active flare. High-intensity activity can produce a pro-inflammatory effect and reduce circulation in the digestive tract, with transient worsening of symptoms.

A session template that works at all three levels

Phase	GREEN	ORANGE	RED
Check-in (2 min)	Colour check; brief statement of the session plan and end time.	Same.	Same.
Mental and physical warm-up (10–15 min)	Full activation: walking, synchronised pace, breath–step synchronisation, joint circling.	Reduced amplitude; seated options available; wave breathing emphasised.	Wave breathing and adapted Jacobson relaxation only.
Technical / main part (20–35 min)	Full discipline content at RPE 4–6; progression permitted.	Maintenance content at RPE 2–4; no progression; one set instead of two.	Passive mobility, observation, supporting role; no significant effort.
Cool-down (5–10 min)	Stretching of worked groups, 20–30 s holds.	Gentle stretching, supported.	Long-exhale breathing; body scan.
Closing (3 min)	Naming one concrete thing that went well.	Same.	Same – attendance itself is the thing that went well.

The right to leave and return

This is the single most important structural feature of a plan for participants with IBD, and it costs nothing. State it once, at the start of every course, to the whole group:

“Anyone can leave the room at any moment without asking and without explaining, and come back in whenever they are ready. If you miss a session, or five, you just come back. There is nothing to catch up.”

Two design consequences follow. First, never build a session whose structure collapses if one person leaves: avoid fixed pairs without a fallback, avoid sequences where one person’s exit strands another. Second, always have a re-entry point: a repeated pattern, a circuit, a returning phrase in the music, so that someone coming back in does not have to interrupt anyone to rejoin.

Progression and deload

Progression in IBD is non-linear by necessity. Two principles keep it honest:

- Extend duration before intensity, and intensity before load. A person who can walk 40 minutes comfortably is ready to walk faster; a person who is not yet comfortable at 20 minutes is not.
- Build in planned deload weeks even when everything is going well, to prevent cumulative overload. In IBD, this is not only a musculoskeletal precaution. It is also an immune one.

And one rule about setbacks: after a flare, restart at the level the person was at when they began the programme, not at the level they had reached before the flare. Restarting too high is the most common reason people abandon a programme permanently after their first relapse.

CREATING AN INCLUSIVE ENVIRONMENT

Everything in the previous chapter can be done correctly and still fail if the environment does not support it. Inclusion in IBD is decided by concrete things: the distance to a toilet, a lock on a door, and the words used in the first two minutes of the first session. This chapter is practical throughout.

The importance of rapid toilet accessibility and privacy

For most participants the location of the toilet is an irrelevant detail. For a participant with IBD it decides whether they enrol, whether they attend, and whether they can concentrate on anything you say. Urgency in IBD may allow only seconds between the first signal and the need for a toilet. Someone who is not certain they can reach one will spend the whole session managing that uncertainty instead of moving.

The three non-negotiables

- PROXIMITY – a working toilet within roughly one minute of the training area, known and visible before the session starts.
- PRIVACY – a door that locks, a washbasin, a bin, and no requirement to pass through a crowded or exposed space to reach it.
- PERMISSION – stated aloud, to the whole group, that anyone may leave at any time without asking and without explaining..

If any of the three is missing, the venue is not yet inclusive, however good the programme is.

Venue audit checklist

Run this once for each venue you use, and again whenever anything changes. It takes ten minutes.

Item	What to check	✓
Distance	Walking time from the furthest point of the training area to the nearest usable toilet. Target: under one minute.	
Availability	Is it open for the whole duration of the session? Are there keys, codes or reception staff involved? Remove every such obstacle in advance.	
Privacy	Working lock; full-height door; no queue visible from the training area; soundproofing adequate.	
Equipment	Toilet paper stocked, washbasin with soap, hand dryer or towels, a bin with a lid – essential for stoma care, and often missing from men's facilities.	
Cleanliness	Checked before the session, not only at the end of the day.	
Accessible cubicle	At least one larger cubicle with a washbasin inside, for stoma management and clothing changes.	
Signage	Clearly visible from the training area – nobody should have to ask where it is.	
Changing rooms	Availability of at least one private changing space or cubicle for participants who do not wish to change in an open room.	
Outdoor sessions	Route planned around known toilets or shelters; alternative shortened route available; group informed of both.	
Exit path	Is the route from the training floor to the toilet direct, or does it cross the middle of the room? Position the group so that leaving is discreet.	

For outdoor and mountain activities

Serbia's, Croatia's and Italy's outdoor programmes present the hardest version of this problem, and the honest answer is that it is solved at the planning stage, not on the trail.

- Plan loop routes rather than out-and-back lines, so that the maximum distance from the start is bounded and known.
- Identify and communicate in advance every mountain hut, café, public facility or reliable natural shelter along the route.

- Always have a shortened alternative route and a defined turnaround point, and present them as normal options in the plan, not as the failure option.
- Brief the whole group, in general terms, that stops will be frequent and unannounced, and that the group waits without comment. This removes the need for any individual to justify a stop.
- Carry biodegradable tissue, hand sanitiser, sealable waste bags and wet wipes as standard group equipment, provided by the organisers, so that carrying them is not a personal marker.
- For participants with a stoma or a pouch: confirm privately, before departure, whether the planned route length and the interval between facilities is acceptable to them.

5.2 The physical environment beyond toilets

Element	Why it matters in IBD	What to do
Water	Dehydration risk is elevated, particularly with an ileostomy, diarrhoea or in heat.	Free water available at all times; scheduled drinking breaks so that nobody has to break the flow to drink.
Temperature	Cold intensifies cramping; heat accelerates dehydration.	Keep the space temperate; allow layers to be added or removed at will; avoid prolonged standing in cool water.
Clothing	Waistbands and belts pressing on the abdomen or a stoma are a common source of discomfort.	No dress code. Never comment on what anyone is wearing.
Position in the room	Being at the far end from the door is a significant stressor.	Let people choose their place; never assign positions by rows or by ability.
Bags and medication	Medication, spare clothing and stoma supplies must stay within reach.	Allow personal bags at the edge of the training area, not in a locked distant locker.
Flooring and lighting	Reduced bone density raises the cost of a fall; dizziness from anaemia raises its likelihood.	No loose mats or cables; adequate lighting; handholds available near balance work.
Noise and music volume	High arousal environments increase anxiety in people already in a state of physiological alertness.	Moderate volume; avoid sudden loud cues; announce changes of pace.

Reducing stigma in the group

Stigma is reduced by building a group culture in which the adaptations a person with IBD needs are simply how the group works, so that using them reveals nothing. Talking to the group about IBD does not achieve this on its own.

Six practices that change a group's culture

- Universal permission, stated first. In the opening two minutes of the first session, before anyone has to ask: leave whenever you need, no asking, no explaining; choose your own intensity; sit out any exercise; rejoin whenever you like.
- Levels for everything, for everyone. Every exercise you set has at least two versions and both are named neutrally – “version A” and “version B”, not “the normal one” and “the easy one”.
- No public accounting. Never count who finished, never announce who did not, never ask why someone stopped.
- Absence is unremarkable. When someone returns after weeks away, they receive exactly the same greeting as someone who was there last week.
- Praise process, not capacity. “Your rhythm was much steadier today”, not “you managed the whole thing”.
- Model the language. The group will use whatever vocabulary you use. If you speak about toilets and rest and adaptation in an ordinary tone, so will they.

Empathy without pity, in practice

Chapter 3 set out the difference in principle. Here it is in the three moments where instructors most often get it wrong.

Moment	The pity response	The empathic response
A participant leaves mid-exercise	Stopping the group; asking loudly if they are all right; following them out.	Continuing without pause. Nothing said. Their place kept as it was.
A participant tells you they have IBD	“Oh, I am so sorry. We will take it really easy with you.”	“Thank you for telling me. What do you need from me: anything about the space, the timing, or particular movements?”
A participant returns after a long flare	“We have missed you! Are you sure you should be here?”	“Good to see you. Today is X – take whichever version suits.”

In each case, empathy transfers information and decisions to the person, while pity takes both away. Whenever you are tempted to protect someone pre-emptively, turn the impulse into a question or an option.

Confidentiality

Health information a participant shares with you is theirs, not yours, and not the group's. Some practical rules:

- Never disclose a participant's condition to other participants, to their family, or to other staff, without explicit permission for each specific case.
- If you keep written records (see the intake form in Annex B³), store them securely, keep them minimal, and record only what changes what you do.
- Do not record diagnoses you do not need. "Avoid abdominal loading; toilet access essential; may leave without notice" is more useful, and more respectful, than a clinical label.
- Photographs and social media: obtain separate, explicit consent, and accept refusal without discussion. Many people with IBD are managing visible bodily changes from therapy.
- When you need to brief an assistant or a substitute instructor, ask the participant first, and share only the operational minimum.

PROTOCOLS FOR EMERGENCIES AND COMMUNICATION

Two protocols cover almost everything an instructor will face: what to do when someone becomes unwell during a session, and how to open a conversation about needs without intruding. Both should be read before they are needed, and the first should be printed and kept at the venue⁴.

If a participant feels unwell during training

Step 1: Stop the activity for that person, not for the group

Discreetly signal to the participant that they should stop. Do not announce it. If the group is doing something that continues without you for a minute, let it continue; if not, give the group a simple task and step aside.

³Annex B.1 – Participant intake form. It asks about needs, not diagnoses, and is meant to be completed privately.

⁴Annex B.4 – Pocket card for the venue wall. Print it and keep it where the session takes place.

Step 2: Assess which of three situations you are in

Situation	Signs	Action
A. Urgency or symptom flare	Sudden need for a toilet Cramping, discomfort The person is oriented and communicative	Say nothing beyond: "Go ahead, take your time." Do not follow, do not send anyone after them Keep the session running On return, no comment, no questions
B. Deterioration requiring rest and review	• Dizziness, marked pallor, cold sweat • Palpitations, breathlessness out of proportion to effort • Severe fatigue, unable to continue • New joint pain or marked weakness	• Seat or lie the person down; elevate the legs if faint • Offer water and, if tolerated, a light carbohydrate • Stay with them; keep the group occupied elsewhere • Do not resume activity that session • Advise medical consultation before the next session; record it
C. Medical emergency	• Loss of consciousness, or near-fainting that does not resolve • Severe abdominal pain with vomiting and/or distension • Significant fresh bleeding • Chest pain, confusion, or a rapidly worsening general state • High fever with rigors	• Call the emergency number immediately – 112 in the EU and Serbia (194 for ambulance in Serbia; 194/112 in Croatia; 118/112 in Italy) • Do not give food, drink or medication • Place in a safe position; keep warm; stay with them • Send someone to meet the ambulance and guide it in • Notify the emergency contact recorded on the intake form • Complete an incident record the same day⁵

The dehydration case – worth knowing separately

- People with frequent diarrhoea, and particularly those with an ileostomy, dehydrate faster than the rest of the group and can do so without obvious thirst.
- Warning signs: dizziness on standing, dark urine or markedly reduced output, muscle cramps, headache, unusual lethargy, dry mouth.
- Action: stop, sit in shade or a cool place, sip fluid, preferably with electrolytes, and do not resume that session.
- Prevention: scheduled drinking breaks, electrolyte options available on hot days and long routes, and no session design that discourages drinking.

⁵Annex B.3 – Incident record. Complete the same day, factually, without interpretation or clinical judgement.

What you must never do

- Never give or suggest medication, including painkillers or anti-diarrhoeals.
- Never encourage a person to “push through” symptoms.
- Never ask the group to wait visibly while a person recovers, if it can be avoided.
- Never discuss what happened with other participants afterwards.
- Never diagnose, and never reassure clinically (“It is probably nothing”). Say instead: “That is for your doctor, not for me.”

After the session

- Write a short factual record the same day: date, what happened, what was done, what was agreed. No interpretation, no diagnosis.
- Contact the participant within 24 hours, briefly and without drama: “Just checking in. No need to reply in detail.”
- Agree the return conditions with them, not for them. If relevant, this can include bringing one sentence from their doctor.
- Review whether anything in the session design contributed, and change it.

6.2 Opening a discussion about needs without infringing on privacy

The instructor's dilemma is genuine: asking nothing means missing information you need to keep someone safe, while asking directly about health is intrusive and, in most jurisdictions, legally sensitive. The resolution is straightforward. Ask about needs and adaptations, never about diagnoses. A person may tell you their diagnosis if they wish; you never need it in order to adapt.

The governing principle You do not need to know what someone has. You need to know what they need. “Is there anything that would make this work better for you?” collects everything useful. “What is wrong with you?” collects nothing you can act on, and costs you the participant's trust.

Four openings that work

When	What to say	Why it works
To the whole group, first session	"Before we start: you can leave the room at any time without asking or explaining. Everything today has at least two versions. Take the one that suits your body. If anything I set up does not work for you, tell me afterwards and I will change it."	Establishes the adaptations as universal, so no one has to disclose anything to access them.
One-to-one, at enrolment	"Is there anything I should know in order to set the sessions up well for you. Anything about the space, the timing, or particular movements? You do not need to tell me why."	Explicitly separates the operational question from the medical one, and pre-authorises a partial answer.
After a participant discloses	"Thank you for telling me. Three things: what should I avoid, what do you need from the space, and how do you want me to handle it if you have to leave?"	Converts disclosure straight into action, so the person is not left wondering what you will do with the information.
Ongoing, every session	"Green, orange or red today?"	Requires no explanation, takes three seconds, and produces exactly the information you need.

What not to ask

- **Do not ask for a diagnosis.** "What condition do you have?" is neither necessary nor yours to ask.
- **Do not ask for details of symptoms.** "How many times a day?" is a question for a gastroenterologist.
- **Do not ask about surgery, scars or a stoma out of curiosity.** If it affects the training, the person will tell you, or you can ask the operational question: "Is there anywhere I should avoid loading or contact?"
- **Do not ask in front of others.** Ever, about anything health-related.
- **Do not ask twice.** If someone declines to elaborate, that is the complete answer.

If a participant does not disclose and you are concerned

Sometimes you will suspect that a participant is managing something they have not mentioned. You are not entitled to know, and pressing will usually end the relationship. What you can do is remove the need to disclose anything at all: increase the number of options in every session, restate the universal permissions, and make one general, non-directed offer:

"If there is ever anything that would make the sessions work better for you, my door is open, and you never have to tell me the reason."

Then leave it. Repeating the offer converts it into pressure.

Communicating with the group about absence and return

Most drop-out after a flare happens not because the person cannot train, but because returning feels socially expensive. Three sentences, used consistently, remove most of that cost:

- **At enrolment:** “Missing sessions is completely normal here and there is nothing to catch up.”
- **During an absence, once only:** “No pressure at all. Whenever you want to come back, just come.” Do not repeat weekly; that becomes surveillance.
- **On return:** “Good to see you”, and then straight into the content, as if they had been there all along.

SUPPORT NETWORK

A functioning support network has three components: the patient associations, the treating physicians, and the sports organisation itself⁶. Each has a defined role, and knowing where the boundaries lie is what keeps the collaboration safe.

Why patient associations are the natural first partner

Patient associations hold three things a sports club does not: direct contact with the people you are trying to reach, lived-experience expertise about what actually helps, and credibility. A programme announced by a sports club reaches sports people. The same programme announced through a patient association reaches the people who have stopped considering themselves sports people at all. These are the people this guide exists for.

What associations can offer you	What you can offer associations
• Access to members who would never see a club's own communication • Review of your materials for tone, accuracy and unintended stigma • Speakers with lived experience for instructor training • Existing trust – members will try something the association endorses • Connections to gastroenterology centres and specialist clinicians • Experience of what has already been tried, and what failed	• A safe, competently run activity their members can actually attend • Trained instructors who do not need to be educated from scratch • Venues, equipment and insurance structures • Documentation of what works, for their own advocacy • Visibility of IBD in a non-medical, non-pitying context A route back into social life for isolated members

⁶Chapter 8 – Contacts, where the patient associations of the three partner countries and the European umbrella body are listed.

How to start a collaboration

- Write to the association before you design the programme, not after. A programme designed without them will contain assumptions they could have corrected in ten minutes.
- Offer something concrete: a specific activity, on a specific day, at a specific venue, with the toilet situation described in the first paragraph.
- Invite a representative to observe a session, and ask them afterwards what they would change.
- Agree who says what publicly, and confirm the confidentiality rules in writing before any member data is shared.
- Report back – attendance, what worked, what did not. Associations are asked for endorsements constantly and rarely told the outcome.

Working with physicians

The relationship between an instructor and a treating physician is narrow and well defined. The physician decides what is medically permissible; the instructor decides how to deliver it safely and adapt it session by session. Neither should do the other's job.

The physician's domain	Shared ground	The instructor's domain
• Diagnosis and disease activity • Medication and therapy • Surgical restrictions and their duration • Anaemia, bone density, nutritional status • Clearance to participate • Interpretation of symptoms	Agreeing what “moderate” means for this person Setting the time frame for reintroducing loading Recognising red flags Encouraging activity as part of care Reviewing after a flare	• Session design and progression • Exercise selection and substitution • Intensity regulation and monitoring • Group environment and inclusion • Motivation and adherence • Emergency response on site

In practice, most communication with physicians will be indirect, through the participant. This is appropriate and sufficient. The three questions in section 2.1 are designed to be carried by the participant to their next appointment and to return with an answer you can use. Direct contact between instructor and physician should happen only with the participant's explicit consent, and preferably in writing.

Where a national IBD centre or a hospital gastroenterology department runs patient education programmes, there is a further opportunity: offering an adapted activity session as part of that programme places movement inside the clinical pathway, where it is far more likely to be taken up than as an external invitation.

Within your own organisation

- **Train more than one person.** A programme that depends on a single informed instructor collapses when that instructor is ill or leaves. At least two people per club should have read this guide.
- **Brief the front desk.** The first question a person with IBD asks is often about toilets, and it is usually asked at reception, by telephone, before they ever meet an instructor. The answer given at that moment decides whether they come.
- **Write the adaptations into the club's standard practice,** not into one instructor's personal habits: permissions announced at every course start, venue audit in the facility checklist, emergency protocol on the wall.
- **Check your insurance and your enrolment forms.** Ensure that a participant declaring a chronic condition is not automatically excluded by a badly drafted health questionnaire designed for a different purpose.
- **Record and share what you learn.** The evidence base for adapted sport in IBD is thin, as Chapter 2 makes clear. Your structured experience genuinely adds to it.

The international level

IFCCA (the International Federation of Crohn's and Ulcerative Colitis Associations) is the umbrella organisation bringing together national IBD patient associations, including those of the three BOOST partner countries. For an instructor, IFCCA is useful in two ways: as a source of patient-facing educational materials that have already been reviewed by patient organisations, and as the route to finding the national association of any country a participant is travelling to.

CONTACTS

The organisations below are the patient associations of the three BOOST partner countries, together with the European umbrella body. Contact details change; before publishing or distributing this guide, verify each entry against the organisation's current website.

Serbia

Organisation	UKUKS – Udruženje obolelih od Kronove bolesti i ulceroznog kolitisa Srbije “Ljiljan Đaković” (Association of Patients with Crohn's Disease and Ulcerative Colitis of Serbia)
Website	https://ukuks.org
Role in BOOST	National IBD patient association; project partner and route to participants across Serbia.
Notes	Operates UKUKS corners in IBD centres, patient panels with physicians, a membership card scheme and a patient forum.

Organisation	PK Tara – mountaineering club, Bajina Bašta (BOOST project partner)
Role in BOOST	Sports partner delivering outdoor and adapted activities.
Related body	PSS – Planinarski savez Srbije (Mountaineering Association of Serbia), the national federation under which hiking, Nordic walking and sport climbing are organised.

Croatia

Organisation	HUCUK – Hrvatsko udruženje za Crohnovu bolest i ulcerozni kolitis (Croatian Crohn's and Ulcerative Colitis Association)
Address	Ulica kralja Zvonimira 20, 10000 Zagreb, Croatia
Telephone	+385 1 3764 059 · mobile +385 95 8165 447
E-mail	mail@hucuk.hr
Website	https://hucuk.hr
Notes	Founded in 2000; volunteer-based. Runs a sports section and art workshops, publishes patient brochures, and operates the “Ne mogu čekati!” (“I can't wait!”) card scheme for urgent toilet access. Regional branches include RUCUK in Rijeka.

Italy

Organisation	IL CASSETTO DEI SOGNI ASD-ETS (CDS) – BOOST project partner
Address	Via Mario Vellani Marchi n. 80 – 41124 Modena (MO) – Italy
Telephone	+39 348 8731476
E-mail	info@cassettodeisogni.it
Website	https://cassettodeisogni.it
Role in BOOST	Italian sports and wellness partner. Founded in 2014, CDS uses sport, physical activity, and holistic movement disciplines as primary tools for social inclusion, health, and well-being. It offers adapted outdoor, indoor, and expressive activities – including martial arts (SSBD), Nordic walking, functional training, Laughter Yoga, Biodanza, and rhythmic-music workshops – tailored to meet the specific physical, psychological, and social needs of vulnerable groups and people living with chronic conditions.
Related body	UISP (Unione Italiana Sport per tutti) – Italian Sport for All Association

Organisation	A.M.I.C.I. Italia ETS – Associazione Nazionale per le Malattie Infiammatorie Croniche dell'Intestino
Address	Via G. Bruschetti 16, 20125 Milano, Italy
Telephone	+39 02 8341 3346
Website	https://amiciitalia.eu
Notes	National association with regional sections across Italy, supported by committees of specialist physicians. Maintains a directory of specialised IBD centres, and campaigns for public toilet access for people with IBD.

International level

Organisation	IFCCA – International Federation of Crohn's and Ulcerative Colitis Associations
Website	https://www.ifcca-ibd.org/
Notes	Umbrella body of national IBD patient associations. Maintains the directory of member associations – the fastest way to find the national association of a country a participant is travelling to.

Emergency numbers

Country	Emergency	Ambulance
Serbia	112	194
Croatia	112	194
Italy	112	118
European Union (all states)	112	112

Local contacts – to be completed by each delivering organisation

Before this guide is handed to instructors in a specific club or region, complete and attach the following:

- Name and telephone of the local coordinator of the programme
- Name and telephone of the nearest IBD centre or gastroenterology department
- Address and access details of each venue used, including toilet arrangements
- The local emergency number and the address to give an ambulance for each venue

The name of the association contact person for participant referrals

ANNEX A - COMPETITIVE SPORT WITH IBD

This annex belongs with Chapter 2. It applies to a small group of participants: those who want to move from recreational activity into regular competition (races, tournaments, leagues) and to do so safely and sustainably. Recreational activity and competitive sport place very different physical and mental demands on the body.

Before starting

A competitive approach only makes sense once the disease has been stable (in remission) for an extended period. This typically means at least three to six months, and with the gastroenterologist's agreement. The athlete should discuss openly with the medical team their ambitions and the training and competition volume they plan to undertake, and realistically assess current energy levels, sleep quality and stress tolerance: competitive sport adds an extra physiological and psychological load.

Building a medical and professional team

- **Gastroenterologist** – regular monitoring of inflammation markers, adjusting therapy in line with training load.
- **Sports physician or exercise physiologist** – assessment of cardiovascular and metabolic capacity.
- **A nutritionist specialised in sports nutrition and IBD** – planning calorie and micronutrient intake (iron, B12, vitamin D) and fuelling strategy before, during and after competition.
- **A coach or sports professional** who understands the specifics of managing a chronic illness when planning training load.

Training planning (periodisation)

- Training should be planned in cycles with clearly defined loading and recovery periods – periodisation, not a linear increase in intensity.
- Build in regular “deload” weeks even when feeling well, to prevent cumulative overload of the immune system.
- Track objective indicators (heart rate variability, sleep quality, perceived exertion) to catch overtraining early.

Nutrition and supplementation

- Energy needs for competitive athletes with IBD can be higher, but also more sensitive to meal composition – an individualised nutrition plan is essential.
- Introduce any supplement (iron, protein, electrolytes and so on) only after consulting a doctor or nutritionist, as some can affect symptoms or interact with therapy.
- Fuelling strategies for long events, for example ultra trail, must be tested in advance during training – never for the first time on race day.

Travel and competitions away from home

- Plan for medication availability (sufficient supply, proper storage temperature) and access to healthcare at the destination.
- Carry medical documentation and, where applicable, a therapy certificate for customs and airline checks.
- If competing under a system subject to anti-doping rules, check in advance whether the therapy requires a Therapeutic Use Exemption (TUE).

Recognising warning signs

- Persistent fatigue that does not resolve with rest, changes in bowel frequency, blood in stool, unexplained weight loss or fever are signals to pause training and competition immediately and consult a doctor.
- Keep a simple symptom-and-training-load diary to spot patterns early.

Mental preparation

- Competitive pressure and fear of a "flare-up" before an important competition are common. Talking to a sports psychologist can help build realistic expectations.
- Define a "Plan B" in advance for situations where symptoms prevent participation; this reduces anxiety and allows better focus on preparation.

Key message:

Competing in competitive sport with IBD is possible, and many athletes do it successfully. It requires a team of professionals, patience, and a willingness to adapt plans according to disease status. The aim is to train in step with the illness.

ANNEX B - TEMPLATES

The templates below are made to be copied, adapted and printed. They are short on purpose: a form that takes ten minutes to complete will not be completed, and a protocol that takes a page to read will not be read in an emergency.

B.1 Participant intake form

This form asks about needs, not diagnoses. It should be completed privately and stored securely, and only the operational lines should ever be shared with an assistant or substitute instructor.

Field	
Name	
Preferred contact	
Emergency contact (name, relationship, telephone)	
Is there anything I should avoid or adapt in the sessions? (movements, positions, intensity, duration)	
Is there anything you need from the space? (toilet proximity, position in the room, temperature, access to your bag)	
How would you like me to handle it if you need to leave during a session?	
Is there anything you would like me NOT to do? (for example: check in on you, mention anything to the group)	
Are you currently under medical follow-up for anything that affects activity? (yes / no - no details required)	
Has your doctor given you any restriction with a time limit? If yes, until when?	
Consent to photographs or social media (yes / no)	
Signature and date	

B.2 Session card

One card per session, filled in before it starts. It takes about a minute, and it is what turns the self-regulation system into something that actually runs.

Date	Activity	Duration announced	Venue / toilet checked

Participant	Level today (G / O / R)	Adaptation applied	Notes for next session

B.3 Incident record

Complete the same day, factually, without interpretation or clinical judgement.

Field	
Date, time, venue	
Participant	
What happened (facts only)	
What was done, and by whom	
Was the emergency service called? (yes / no, time)	
Was the emergency contact notified? (yes / no, time)	
What was agreed about returning	
What will be changed in the session design	
Instructor name and signature	

B.4 Pocket card for the venue wall

IF A PARTICIPANT FEELS UNWELL

- URGENCY → “Go ahead, take your time.” Say nothing else. Do not follow. Keep the session running. No comment on return.
 - DIZZY, PALE, EXHAUSTED, PALPITATIONS → Sit or lie down, legs raised. Water. Stay with them. No further activity today. Advise medical review.
 - UNCONSCIOUS · SEVERE ABDOMINAL PAIN WITH VOMITING · SIGNIFICANT BLEEDING · CHEST PAIN · CONFUSION → Call 112 immediately. No food, drink or medication. Safe position, keep warm, stay with them. Send someone to meet the ambulance. Notify the emergency contact.
- NEVER: give medication · encourage pushing through · diagnose or reassure clinically · discuss it with other participants.

THE THREE SENTENCES TO SAY AT THE START OF EVERY COURSE

- “You can leave the room at any time, without asking and without explaining.”
- “Everything today has at least two versions. Take the one that suits your body.”
- “If you miss sessions, you just come back. There is nothing to catch up.”

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Final note All information in this guide is educational in character and does not replace medical or psychological consultation. It was prepared within the BOOST project as a shared working tool for instructors, coaches and activity leaders in Italy, Croatia and Serbia. It is intended to be revised: local contacts completed, sport sheets annotated with what actually happened in practice, and sections updated as the evidence base grows.



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