

# Mindful Muscles Policy & Practice Recommendations 2023

**M**INDFULNESS

**A**CCCEPTANCE

**S**ELF-COMPASSION

**C**HARACTER STRENGTHS



**MINDFUL**  
MUSCLES



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## Project team and acknowledgements

The main objective of Mindful Muscles was to empower athletes and exercisers with Mindfulness, Acceptance, Self-Compassion and Character Strengths (MASC) to adopt a positive mindset towards their bodies. This could have not been achieved without sharing these values and thoughts with our whole project team. Hence, we express our sincerest gratitude to each individual and partner organisation for collaboratively creating a safe, compassionate working environment where everyone was accepted as they are and the focus was on emphasising each other's strengths.

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# 1 Introduction to Mindful Muscles

The Mindful Muscles project aims to support clean sport education and prevent the use of image-and-performance enhancement drugs (IPEDs) in recreational sport<sup>[1]</sup> settings. To do so, Mindful Muscles uses a positive approach to tackle the factors that can lead to use of IPEDs in recreational sport, such as body image concerns, and physical appearance and performance worries and anxiety. For this purpose, the project's consortium has developed a series of research-informed self-administered exercises focusing on Mindfulness, Acceptance, Self-compassion, and Character strengths and values. The project was funded by Erasmus+ Sport Programme and was developed on the foundations of previously funded Erasmus+ Sport projects that were completed by members of the Mindful Muscles consortium (e.g., SAFE YOU+, C.S.I, GAME, IMPACT, and DELTS).

The specific aims of MINDFUL MUSCLES were to:

- Identify best practices in evidence-based Mindfulness/Acceptance, Character Strengths, and Self-Compassion (MASC) interventions and contextualise them in anti-doping/clean sport education for recreational, amateur, and grassroots sport.
- Develop and evaluate self-administered MASC resources for athletes with different doping experiences in recreational, amateur, and grassroots sport.
- Develop and evaluate MASC intervention guidelines for educators, healthcare professionals, and relevant stakeholders working in anti-doping and clean sport education, with an emphasis on both prevention and harm reduction.
- Develop policy and practice recommendations for the incorporation of strengths-based approaches in the context of anti-doping/clean sport education.
- Inspire research and application of strengths-based approaches in anti-doping/clean sport education.

Mindful Muscles involved all the consortium members to actively participate in the project by utilising each partner organisations' knowledge, expertise and background. The project included partners from anti-doping practice (Estonian Anti-Doping Agency), drug abuse prevention and harm reduction (A-Clinic Foundation and Mainline Foundation), sport and sport medicine (British Weightlifting and the Serbian Sport Medicine Association) and the academic sector (Aristotle University of Thessaloniki, Polytechnic Institute of Lisbon, and Sheffield Hallam University). In addition to developing and evaluating the self-administered MASC exercises for recreational sport athletes and exercisers, Project Mindful Muscles also co-developed a Practitioners' Manual. This manual helps professionals in relevant fields (e.g., counselling and/or education to prevent the use of IPEDs in recreational sport) to integrate MASC resources into their daily practice.

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[1] By recreational sport we mean any exercise and physical activity, which takes place in a low-level competitive or non-competitive environment, and engages participants/individuals in sport events, fitness centres, sport and leisure clubs, and outdoor-based activities.



Finally, project Mindful Muscles developed an interdisciplinary Community of Practice of early career researchers conducting research in IPEDs use. The key goal of this community was to support the exchange of knowledge and networking of early career researchers and established researchers in the field. To do so, the Community of Practice utilised a series of open lecture series consisting of five different professionals' perspectives on IPEDs use.

These lectures are available online on YouTube and have been already viewed by more than 500 individuals. See Mindful Muscles YouTube channel:

<https://www.youtube.com/channel/UCSmRe24M1gffVEm286JQpWw>

In the sections that follow, we present the key information about the Mindful Muscles modules, and further explain how these can be used to support anti-doping education, practice, and policy in recreational sport.



## 2 Guidelines for Exercisers and Athletes

The MASC self-administered exercises were informed following two scoping literature reviews about psychological interventions relevant to tackling body image disturbances and concerns, and substance misuse behaviour and beliefs. Through the literature review, and following a co-creation process with end-users (i.e., exercisers and recreational sport athletes in the countries participating in the project) four Modules were developed to respectively address: 1) Values & Thoughts, 2) Self-acceptance, 3) Self-compassion, 4) Mindfulness. The indicative content of each module is presented below.

### Values & Thoughts

- Identify, categorise, and consider unhelpful thought patterns
- Recognize personal values, their meaningfulness and learn to utilise them in the context of exercising
- Thought reflection tasks
- Self-assessment questionnaire

### Self-acceptance

- Identify thoughts, emotions and patterns leading to different kinds of scenarios
- Learning to accept and cope with thoughts and emotions
- Self-reflecting task
- Gratitude journal

### Self-compassion

- Adopting non-judgmental view
- Learning how to become more compassionate on self
- Self-compassion and body screening exercise
- Meditation audio and meta-meditation exercise
- Compassionate self-validation

### Mindfulness

- Basics of mindfulness, how to use and utilise it in the contents of exercise and sport
- Breathing and awareness exercises
- Practice diary for mindfulness

The modules are targeted to people participating in recreational sport and are available in 7 languages: English, Finnish, Portuguese, Estonian, Serbian, Greek, and Dutch – reflecting the national languages of the countries participating in the project, and they can be accessed online here:

<https://mindfulmuscles.org/resources-for-exercisers-documents/>

Using a mixed methods research design, the project's consortium performed a feasibility study where the MASC modules were evaluated for the perceived usefulness, relevance, easiness of use, and satisfaction with their content by more than 250 exercisers across 7 countries. Overall, the results of this evaluation showed that exercisers favourably assessed the MASC modules of Mindful Muscles across all the assessment criteria.

The specific exercises introduced in the Mindful Muscles modules can be considered to be part of the recreational exercisers and athletes regular exercise routine. In addition, exercises and techniques presented in the workbooks could be considered as part of the recovery from sports and could be utilised to handle overall physiological and psychological stress outside of exercising and sports as well. Practices can be done separately or be included in the other workouts as well. Individual exercises can be done anytime and anywhere, since they are short and easy to implement to everyday life. Since each module's content is supported by the other modules, it is recommended to go through all of the four modules. However, modules can be done at any order. Most essential thing is to be receptive to psychological exercises, which, similarly to physical activity exercises, also require an open-mind, motivation and commitment. The main benefit being that the motives for exercise could shift to a more accepting and compassionate approach towards oneself, and eventually refrain from using or wanting to use IPEDs to overcome physical appearance and sport performance worries and concerns.

In addition to the Mindful Muscles modules, the consortium of our project developed the Practitioners' Manual – a practical guide explaining the key concepts and approach of the project, and how the Mindful Muscles modules can be integrated in professional practice. The Practitioners' Manual is available here:

<https://mindfulmuscles.org/resources-for-practitioners-documents-eng/>

## 3 Guidelines for Healthcare Practitioners

### 1. MASC modules in Clinical Work:

Confidential patient-doctor relationship is an essential part of the healthcare system which also presents an appropriate setting for the Mindful Muscles approach. Healthcare practitioners (e.g., general practitioners, internists, sport physicians, physical therapists, nurses) could integrate MASC modules into their clinical work. Modules could be used as preventive and educational ways on primary and special health care for example when giving exercise or lifestyle recommendations to clients. The Mindful Muscles modules and the exercises included therein could be utilised as a part of treatment plans to patients with a history of IPEDs use, or who are at-risk for using IPEDs (e.g., seeking information from healthcare practitioners about the use of IPEDs, such as anabolic steroids). In addition, physical health workers could use the Mindful Muscles modules and exercises when working with recreational sport athletes and exercisers who express concerns, worries, and anxiety over their physical appearance and/or sport performance.

### 2. MASC Modules in Healthcare Practitioners' Education:

The Mindful Muscles modules can be incorporated in educational initiatives targeting doping in recreational sport and exercise, at different levels – from seminars and awareness-raising workshops, to more focused courses on mental health promotion in sport and exercise.

### 3. Health and Medical Information Databases:

To support the provision of mental health support among people involved in recreational sport and exercise, the Mindful Muscles modules can be integrated in the health and medical information databases used in primary healthcare settings.



## 4 Guidelines for Sports Practitioners

### 1. MASC modules in Coaching, Personal training and Fitness Instructing:

Sports supervision is an essential component in both elite and recreational sports and exercise settings. Practitioners in the field of sports have a strong influence over athletes' and exercisers' training programs and the exercise mentality in general. Hence, sports professionals should pay close attention to the health and wellbeing of their clients, covering all physical, social, and psychological health aspects. Overall, the Mindful Muscles modules could be integrated in the sports supervision of exercises and athletes, and become part of or support the training program. Training programs could also measure the impact of Mindful Muscles modules on sport performance, recovery, allostatic load, and performance/appearance related stress reduction. Coaches, personal trainers, fitness instructors and associated professions could also benefit from empirical learning and self-practising of Mindful Muscles workbooks to discover and be prepared for potential feelings that might emerge during these types of psychological exercises.

### 2. MASC in Sport Science Education:

The Mindful Muscles outputs (i.e., modules and the practitioners' manual) represent suitable learning and practice resources for students of sport science disciplines, at different levels of education, from post-secondary professional training to specialised higher education undergraduate and postgraduate courses.

### 3. Safe and Supportive Exercise Environment:

The Mindful Muscles modules can be used by professionals and relevant stakeholder groups to promote safe and support exercise environments. This is highly relevant to the corporate social responsibility of the fitness sector (e.g., fitness centres and gyms) and can actively protect the health and safety of customers using sport and exercise facilities.

Most importantly, the Mindful Muscles modules can be used to support harm reduction by providing practitioners and professionals in related areas (e.g., mental health support, counselling for substance use, personal training) with the opportunity to offer guidance and signposting to individuals using IPEDs. Adopting a more compassionate and accepting perspective over one's physical appearance and sport performance in a non-judgmental and open way can help in reducing the need and motivation to continue using IPEDs.

#### 4. Closer Focus on Sports at Higher Risk for IPEDs Use:

Research has shown that strength-related sports (e.g., fitness, CrossFit, bodybuilding, weightlifting) can be at higher risk for using/wanting to use IPEDs and associated body image concerns and worries. Therefore, it is advisable that the Mindful Muscles outputs (Modules and Practitioners' Manual) are considered for use by healthcare and sport professionals and specialists working in or with people from strength-related sports.



## 5 Guidelines for Anti-Doping Organisations

### 1. Promoting Anti-Doping Education in Recreational Sport:

Currently, the anti-doping education programs of National Anti-Doping Organisations (NADOs) emphasise overall awareness-raising about the use of IPEDs and their health consequences and the moral values associated with sport participation. Mindful Muscles presents a complementary approach that can support existing NADO efforts to tackle doping, especially in recreational sport settings.

### 2. Anti-Doping Education for Coaches, Instructors, and Personal Trainers:

In efforts to promote anti-doping education and practices within recreational sport settings, NADOs can support the training of coaches, instructors, and personal trainers using the Mindful Muscles resources, such as the Modules and the Practitioners' Manual. This can provide sport/coaching professionals with valuable tools to combine psychological and physical training, in order to achieve better results and to have a positive impact on their customers/athletes' mental health.

### 3. Possibility for Independent Learning:

The Mindful Muscles modules are suitable for independent learning. NADOs should provide these materials for self-administered learning, to encourage target groups (e.g., athletes, exercisers, and coaches in recreational sport) practising MASC techniques on their own, enhancing individual's freedom of choice and empowerment.

### 4. Research Practices:

In line with the International Standard for Education of the World Anti-Doping Agency, NADOs may consider contributing to research activities, and this can involve studies to better understand the relevance and impact of the Mindful Muscles approach in anti-doping education.

## 6 Guidelines for Mental Health and Addiction Care

### 1. Mindful Muscles in Mental Health and Addiction Care:

By utilising the Mindful Muscles Practitioner's Manual, mental health and addiction care workers are recommended to integrate the Mindful Muscles exercises to their face-to-face clinical therapy services such as Cognitive behavioural therapy (CBT) interventions, where the aim is to develop the client's self-compassion and acceptance towards sports and exercise. Relevant therapy target groups are e.g., recreational athletes, people with body-image issues or eating disorders, and substance abusers. Substance abuse includes doping use in recreational sports, such as anabolic-androgenic steroid (AAS) users. Intervention could also be considered to target groups who are at risk of using (e.g., <25-years old young men) or consider starting to use.

### 2. Mindful Muscles Approach in Digital Services Focusing on Mental Health Support and Addiction Prevention and Harm Reduction.

Organisations who offer digital services, such as anonymous online health counselling (private online chat, support phone, bulletin boards) could implement Mindful Muscles modules in their operations considering addiction and substance abuse prevention and harm reduction. For example, health counsellors could start by introducing simple Mindful Muscles exercises (e.g., compassionate body scan and self-validation) to their online responses.

### 3. Integrate Mindful Muscles to Substance Abuse Prevention Education.

Organisations working with substance abuse prevention and recreational sport could integrate Mindful Muscles modules as part of their educational operations of the fitness industry, municipalities, schools, universities and students (e.g., sports & exercise, psychology, health & medical sciences, healthcare).



#### **4. Communication Strategy about Body Positivity, Healthy Body-image and Positive Psychology Approach to Exercise.**

There is a constant rise of social-media-based misinformation in sports and exercise environments which emphasises the body-image and subjective beauty ideals as exercise and sport participation goals. Mental health and addiction care organisations working in the field of sports and exercise and the fitness industry can include the Mindful Muscles approach to their communication strategies, aiming to strengthen self-compassion and self-acceptance to one's own body. Organisations can also consider using ambassadors (lifestyle coaches, social media influencers) for spreading the message about body peace and sustainable motives for exercise.

#### **5. Research of Mindful Muscles Approach in the Mental Health and Addiction Field.**

Research strategies can be implemented throughout the Mindful Muscles integration strategies and guidelines mentioned above (1-4). Research the effectiveness and utilisation of Mindful Muscles workbooks and techniques used in them in face-to-face encounters, digital services, education and communication.



## 7 Conclusions

In conclusion, there is a wide range of areas to further disseminate and implement the Mindful Muscles approach that could either relate to 1) creating a safe and healthy training environment for all exercisers and athletes, or 2) prevention, harm reduction and treatment of IPEDs use. Exercises introduced in the Mindful Muscles modules require that both the professionals and exercisers are open-minded, motivated and committed to psychological exercises. The main benefit being a more positive, accepting, and compassionate view towards one's physical appearance and sport/exercise participation.



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