Manifesto to Promote Physical Activity Post-COVID-19:
An International Call for Urgent Action

"A summons to all citizens, rulers and heads of private entities, to a broad movement in favor of a more active and healthier lifestyle, so that we can be better prepared for current and future pandemics with similar characteristics going beyond the limits of solidarity characteristics

The pandemic demands that we think not only about individual safety, but also that of the others around us. Just as important as adopting a more active lifestyle and reducing sedentary behavior to cope with the COVID-19 pandemic is the need for solidarity among all of us in the search for a better, more just, and healthier world."

This manifesto proposed by Brazilian professionals and scientists is the result of a collective effort in favor of a more active, healthier life for all that also involved scientists from other countries who participated in the *43rd International Symposium of Sports Sciences* held in São Paulo in October 2020 that was promoted by CELAFISCS (São Caetano do Sul Physical Fitness Laboratory Study Center).

This reference-document aims to sensitize and mobilize the most distinct population groups, governmental agencies, non-governmental agencies and private initiatives to promote a more active lifestyle, considering its preventive effects on mitigating pandemics such as COVID-19, especially when performed in an intersectoral and multi-professional manner.

Public guidelines from the United Nations (UN), the World Health Organization (WHO) and the American College of Sports Medicine (ACSM), as well as recent scientific publications about the topic, and consultations with local and internationally well-known scientists were considered.

The essence of this document prioritizes education, values local/regional cultures and proposes to reduce inequality in opportunities to access public assets to promote a healthier and more active life in more communities. It highlights the importance of physical activity with regard to COVID-19.

Physical activity is a behavior present in different dimensions of human existence and must be considered fundamental for quality of life in all age groups. The high prevalence of physical inactivity has consequences for individual and collective health, with a significant economic and social impact. For the full potential of physical activity practice to be achieved, its promotion, together with proposals to reduce sedentary behavior, must be seen as a challenge for everyone; this is especially the case in times of reduced opportunities to be active in the current COVID-19 pandemic. Social determinants of health and quality of life have never been challenged in such a broad and urgent manner, especially highlighting another fundamental factor in human

relationships and in combating inequalities and intolerance: solidarity among people, communities, cities and nations.

Articulated and systemic efforts to cope with both pandemics - COVID-19 and inactivity - are necessary and will continue to increasingly impact all aspects of individual and collective life unequally. The most effective actions have considered local culture, in the perspective of a global crises dimension, such as in previous epidemics. It was found that these actions affect several factors associated with quality of life, particularly in interpersonal relations, family income, usual study standards, work and leisure, cultural and sports events and the practice of physical activity.

In addition to the different benefits of physical activity to prevent and treat diseases and to promote health, with emphasis on primary healthcare, the fact that movement is part of human nature must be stressed. It is fundamental for a healthier, more productive and more fulfilling existence.

The action of promoting physical activity and decreasing sedentary behavior must educate, motivate and increase opportunities for well-informed and qualified choices, exploring its wide possibilities for a better and more unified world.

Unfortunately, a policy that associates enhancing physical activity practice with a decrease in sedentary lifestyle is still an undervalued strategy, especially considering its actual benefits.

We are not going to keep physical activity like a “secret remedy” in light of the amount of qualified evidence recommending its promotion.

Scientific Evidence

The importance of physical activity practice for health is widely established, with evidence for the cardiovascular, metabolic and immune systems, as well as for mental health associated with greater control of stress, anxiety and depression (1,2,3,4,5). More recently, an active lifestyle to promote health has included being more physically active and decreasing sedentary behavior. Therefore, the new recommendations have combined both factors (6,7,8,9,10).

Recent evidence has shown that light-intensity physical activity can also provide health benefits, with its duration being relatively more important. Studies have shown that any body movement is better than none and that more is better than less, where each step counts to prevent different health problems and to promote health, resulting in a general state of wellbeing. Therefore, the benefits to health can occur in much smaller volumes compared to the commonly proposed guidelines of 150 minutes per week or 10 thousand steps per day (11,12).

Physical isolation stemming from preventive measures has exacerbated the global level of sedentarism, motivating important national and international researchers and institutions to call attention to the need to promote physical activity during the pandemic (13,14,15,16,17,18).

Physical inactivity is already considered a pandemic, responsible for over 5 million deaths a year around the world (19,20). The combination of the COVID-19 pandemic with that of physical inactivity and obesity characterizes a state of syndemic, where the interaction between them results in an increased prevalence of comorbidities, such as obesity, hypertension, diabetes, cancer, respiratory and rheumatological diseases, mainly in low income populations, which would affect the risk of more severe forms of COVID-19 even further (21,22,23,24).

There is evidence of a drastic reduction in the levels of physical activity during the pandemic (25,26), in spite of a recent publication reporting greater interest in the search for information about physical activity during this period (27).

Physical inactivity can reduce the levels of fitness (also decreasing cardiovascular capacity, muscle strength, flexibility, balance, among other variables) and contribute to the emergence or worsening of comorbidities, such as obesity, which can exacerbate the COVID-19 clinical picture even further (28,29).

Evidence from previous viral pandemics indicates that physical activity can reduce the worsening of the respiratory clinical presentation and mortality (30,31). As well, it can positively influence the effects of vaccination, mainly in the elderly (32,33, 34,35,36). It is plausible to infer that these results could be transported to the COVID-19 reality (37,38). Light and moderate physical activity can produce immune responses in cases of infection, decreasing pro-inflammatory markers (39).

On the other hand, scientific literature emphasizes that intense and long-lasting physical activity should not be recommended as it leads to transitory immunosuppression, exposing people to higher chances of catching or worsening a viral infection (40).

Studies have demonstrated, the importance of practicing physical activity during the pandemic in different settings (especially indoors and outdoors) with adequate physical distancing. As for fitness centers, clinics, clubs, schools, among other closed environments, it will always be necessary to address the sanitary measures and recommendations, with due civil responsibility, the proper principles and the development of a culture that promotes a healthy lifestyle. (13,14,15,16,17,18,37,40).

This body of evidence requires a call to action.

A call to action is urgent for a healthy life

The current scenario of a pandemic and scientific evidence that physical activity is beneficial create great challenges, among which is becoming physically active or maintaining physical activity safely, while strictly respecting the behavioral and environmental guidance that aims to reduce the chances of contamination by COVID-19. It is important to highlight that the post-pandemic setting reduces the opportunities for being physically active, especially with people who have a greater need for physical isolation, such as the elderly and people suffering from chronic diseases.

In this context and in light of the current knowledge regarding the benefits of physical activity and the adoption of a less sedentary lifestyle with respect to COVID-19, it is advisable to:

- 1 – Pursue a more active and healthier lifestyle, according to individual and social responsibility – you, I and us – in addition to governmental agencies, non-governmental agencies and private institutions, during and after the pandemic, even after the emergence of vaccines.
- 2 – Promote this lifestyle with the support of public policies and non-governmental organizations, through concrete and articulated programs, projects and actions, in line with the economic and social inequality demands, focusing on the mobilization of new generations.
- 3 – Prioritize a healthier life through the synergy between different public policies that emphasize the importance of active mobility for people, generating a multiplying effect over the other benefits of an active and sustainable lifestyle, anchored on democratization of access to essential public health services, basic sanitation and universalization of quality education.
- 4 – Make use of local innovative strategies, in line with the Global Physical Activity Action Plan Guidelines 2018-2030 from the WHO. The adoption of this “glocal” perspective, implies prioritizing education and reducing inequality of access to public assets at the local level, to reach the global objective of having more active people in healthier and more unified communities.
- 5 – Focus on increasing stimuli and opportunities for exercise in a more active life at school. When in-person activities are resumed, an in-depth review of the school setting will be necessary, transforming it into a place that promotes physical activity combined with the reduction of sedentary behavior, thus promoting health throughout life.

- 6 – Support specific social groups in different manifestations of physical activity, focusing on students, employees, the elderly, women, disabled people and other minority and vulnerable groups.
- 7 – Search for innovative strategies so people can practice physical activities at home and in open environments, respecting all the sanitary recommendations of each region, especially when in closed places.
- 8 – Give due consideration to the benefits of regular moderate physical activity for the immune system, avoiding vigorous physical activity in situations with exposure to COVID-19 or to people who are more susceptible to its more severe forms.
- 9 – Promote an active attitude in one's daily routine*. Move more and sit less. Increase your daily number of steps. It is preferable to accumulate 150 minutes or more per week of moderate physical activity. Whenever possible, replace your sitting time with light physical activities such as standing up and moving. Remember that all movements count towards promoting health.*
- 10 – Encourage the use of digital media to disseminate strategies, resources, modes and examples of physical activity promotion and reduction of sedentary behavior, leading people to adopt a healthier and more active lifestyle.
- 11 – Invest strongly in policies and actions that promote walking, the use of bicycles, practicing sports, games and more active recreation in public spaces.
- 12 – Organize different approaches to promoting physical activity and interventions focusing on physical activities according to sustainable development models and cooperative management per groups of people based on the balance among their physical, social and economic settings.

Therefore, there is an **urgent call to action**

"A summons to all citizens, rulers and heads of private entities, to a broad movement in favor of a more active and healthier lifestyle, so that we can be better prepared for current and future pandemics with similar characteristics, going beyond the limits of solidarity.

The pandemic demands that we think not only about individual safety, but also that of the others around us. Just as important as adopting a more active lifestyle and reducing sedentary behavior in coping with the COVID-19 pandemic, above all, is to have a common unified front in the search for a better, more just and healthier world."

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