



Introduction

Jean-Michel Oppert

► To cite this version:

| Jean-Michel Oppert. Introduction. Obesity Reviews, 2021. hal-03277190

HAL Id: hal-03277190

<https://hal.sorbonne-universite.fr/hal-03277190>

Submitted on 2 Jul 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

INTRODUCTION

Introduction

Jean-Michel Oppert 

Assistance Publique-Hôpitaux de Paris (AP-HP), Pitié-Salpêtrière Hospital, Department of Nutrition, Institute of Cardiometabolism and Nutrition, Sorbonne University, Paris, France

Correspondence

Prof. Jean-Michel Oppert, MD PhD, Service de Nutrition, Hôpital Pitié-Salpêtrière, 47-83 Boulevard de l'Hôpital, 75013 Paris, France.
Email: jean-michel.oppert@aphp.fr

KEYWORDS: exercise, meta-analysis, obesity, physical activity, systematic review

The management of overweight and obesity is—rightly—recognized, by the public, patients, and professionals, as being a challenging task. This is even more so in the public health crisis where the world is since the beginning of 2020. What has been called the collision of the two pandemics, the one of Sars-Cov2 and the one of obesity makes the fact that obesity can be a vital threat to individuals and populations more visible than ever. It also points to the importance of seriously addressing the issue of improving our current management strategies.

It is common sense that adopting new behaviors, primarily regarding eating and physical activity, represents a cornerstone of obesity management. However, this is everything but an easy undertaking. Physical activity, understood in its broadest sense as any bodily movement that expends some energy above resting level, plays a central role in energy balance. Its function in obesity management however goes much beyond calories burnt. For example, studies over the last two decades have shown in both men and women the value of higher physical fitness for increased longevity independent of weight status, a very positive message both for patients and for health care professionals.

Exercise is a special form of physical activity that is structured, repetitive, and planned, with the aim to enhance performance and improve health. Exercise training therefore appears as an important component of a structured and long-term approach of management of overweight and obesity. Traditional forms of exercise training include aerobic (or endurance), resistance (or strength), or combined aerobic and resistance training. High-intensity interval training (HIIT) is an example of a more recent type of exercise training that receives increasing attention in the field of overweight and obesity. However, there is still uncertainty about the respective importance of different types of exercise training on obesity-related outcomes of importance regarding management.

To answer the need of an updated evidence base on exercise training in the management of overweight and obesity in adults, a

Physical Activity Working Group was set up under the auspices of the European Association for the Study of Obesity (EASO), a federation of professional membership associations from 36 countries across Europe. EASO has at its core the mission to provide key elements of high-quality education about obesity management for all interested professionals. Experts from the EASO Physical Activity Working Group developed a set of specific research questions and systematically searched and analyzed the literature on the effects of exercise training programs on (1) weight loss, body composition changes (total body fat, lean body mass, and abdominal visceral fat) and weight maintenance, (2) cardio-metabolic health (insulin sensitivity, blood pressure, and intra-hepatic fat), (3) physical fitness (VO₂max and muscle strength), (4) energy intake and appetite control (appetite ratings, eating behavior traits, and food reward), (5) bariatric surgery outcomes, (6) quality of life and psychological outcomes (including depression, anxiety, perceived stress, and body image), and (7) behavior change techniques to increase physical activity. This supplement presents seven systematic reviews produced through this large collaborative effort. A summary paper by the Working Group synthesizes the evidence statements directly resulting from the systematic reviews and proposes 15 recommendations regarding exercise training in the management of overweight and obesity.

The series of articles in this supplement provides new evidence detailing the many beneficial effects of exercise in persons with overweight or obesity. The findings emphasize the importance of providing specific forms of training for specific outcomes that will improve the overall health of patients. The relatively small magnitude of weight loss obtained through exercise, at least on an average basis, does not diminish in any sense the multiple benefits of exercise on other important health outcomes. This work should help develop the best approach possible integrating exercise as an important, although as yet often underutilized, component of a comprehensive approach of

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2021 The Author. *Obesity Reviews* published by John Wiley & Sons Ltd on behalf of World Obesity Federation.

management of overweight and obesity in adults. It should therefore be of value both for professionals and for patients.

ACKNOWLEDGMENT

The author would like to thank the European Association for the Study of Obesity (EASO) for support in conducting this work.

CONFLICT OF INTEREST

The author has no conflict of interest to declare.

ORCID

Jean-Michel Oppert  <https://orcid.org/0000-0003-0324-4820>