

**The impact of a 12-week community based intervention on physical fitness and body morphology in sedentary Irish males.**



## **20th Anniversary Annual Health Promotion Conference**

**Knowledge to Action: Using Research Evidence in  
Health Promotion Policy and Practice**

**Presented by:** Liam Kelly  
**MoM Project Lead Supervisor:** Paula Carroll

**Date:** 15<sup>th</sup> June 2016  
**Supervisor:** Noel Richardson



**The National Centre for Men's Health, Institute of Technology Carlow.**



# Men in Ireland

- Have a life expectancy 4.5 years lower than their female counterparts.
- Are less likely to engage in healthy lifestyle behaviours.
- Are less likely to interact with health professionals.
- Declining PA levels with age, coupled with increasing rates of overweight/obesity have been identified as key causal factors in 'the burden of ill-health' experienced by men in Ireland



# What is Men on the Move?

1. Impact of the programme on the physical fitness, weight status and general health and lives of the men who attend.
2. Process of delivering the MoM programme with a view to developing a 'model of good practice' that could be adopted elsewhere, focusing on capacity building, partnership and sustainability.



## Methods

**906**

**Sedentary Males Recruited**

**4 'Intervention' Counties.**

**[n=489]**

**4 'Comparison in waiting' Counties.**

**[n=417]**

# Methods: Intervention

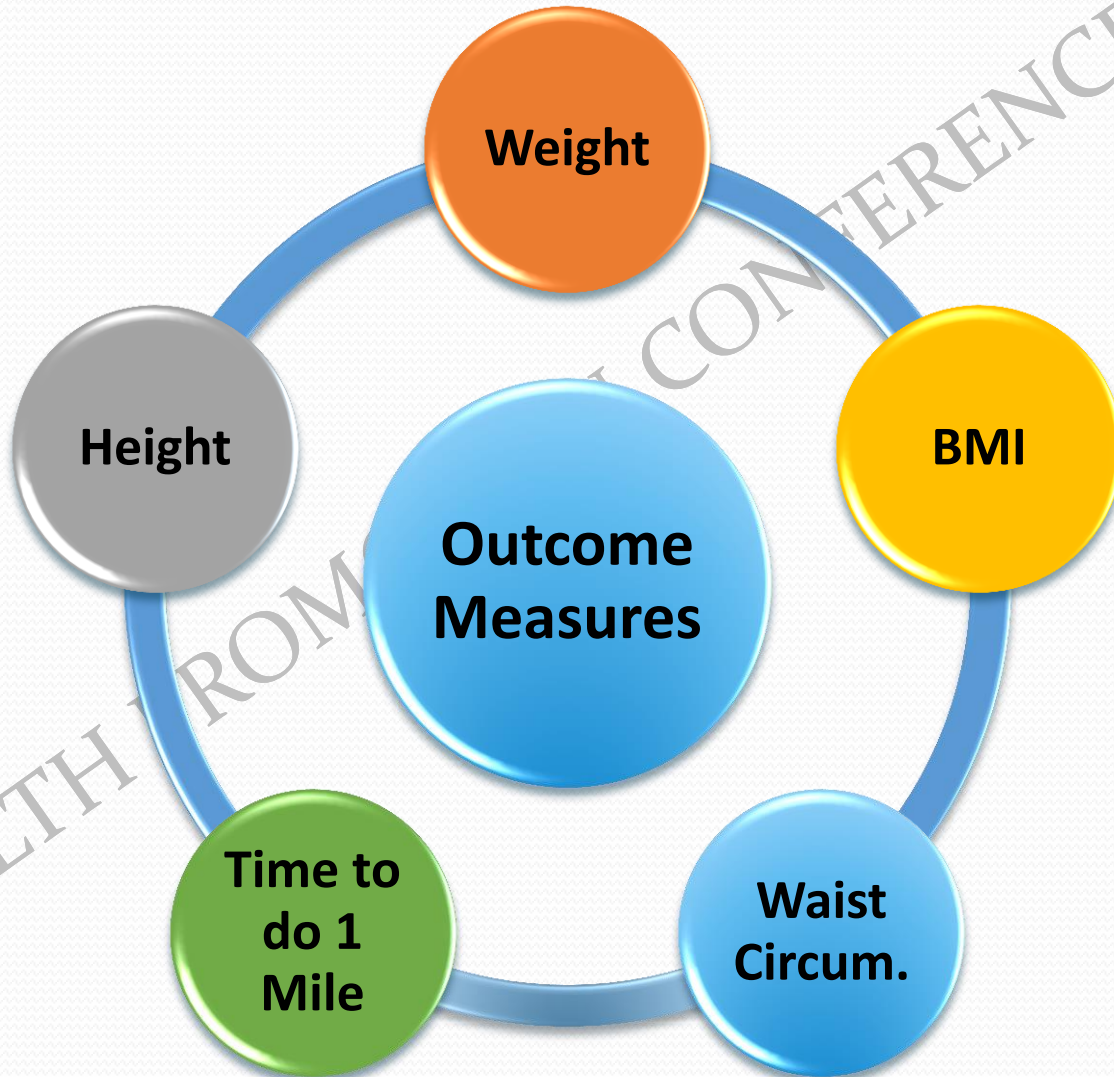
Goal: Improve physical fitness and overall health and well-being of adult men in Ireland through structured group exercise.

12-week community based PA programme delivered by LSP's

## PA Intervention

- Structured group exercise delivered by a trained PA coordinator 1 hour twice a week.
- Two facilitated workshops [diet and well-being]
- An information booklet with a PA log
- A 5km celebration event at 12 weeks
- A pedometer for independent PA sessions

# Methods: Outcome Measures



HEALTH FROM CONGRESS CONFERENCE 2016

# Baseline Recorded Measurements

CE 2016

Demographics	Mean $\pm$ SD	Range
Age (yr)	50.93 $\pm$ 10.67	<b>19 - 87</b>
Height (cm)	175.28 $\pm$ 6.61	154.0 - 195.6
Weight (kg)	92.69 $\pm$ 15.85	54.2 - 158.5

Outcome Measure	Mean $\pm$ SD	Range
BMI	29.91 $\pm$ 3.04	17.40 - 42.9
Waist Circumference (cm)	105.02 $\pm$ 12.98	72.0 - 153.0
Time to do 1 Mile (m:s)	13:14 $\pm$ 3:32	06:34 - 30:46

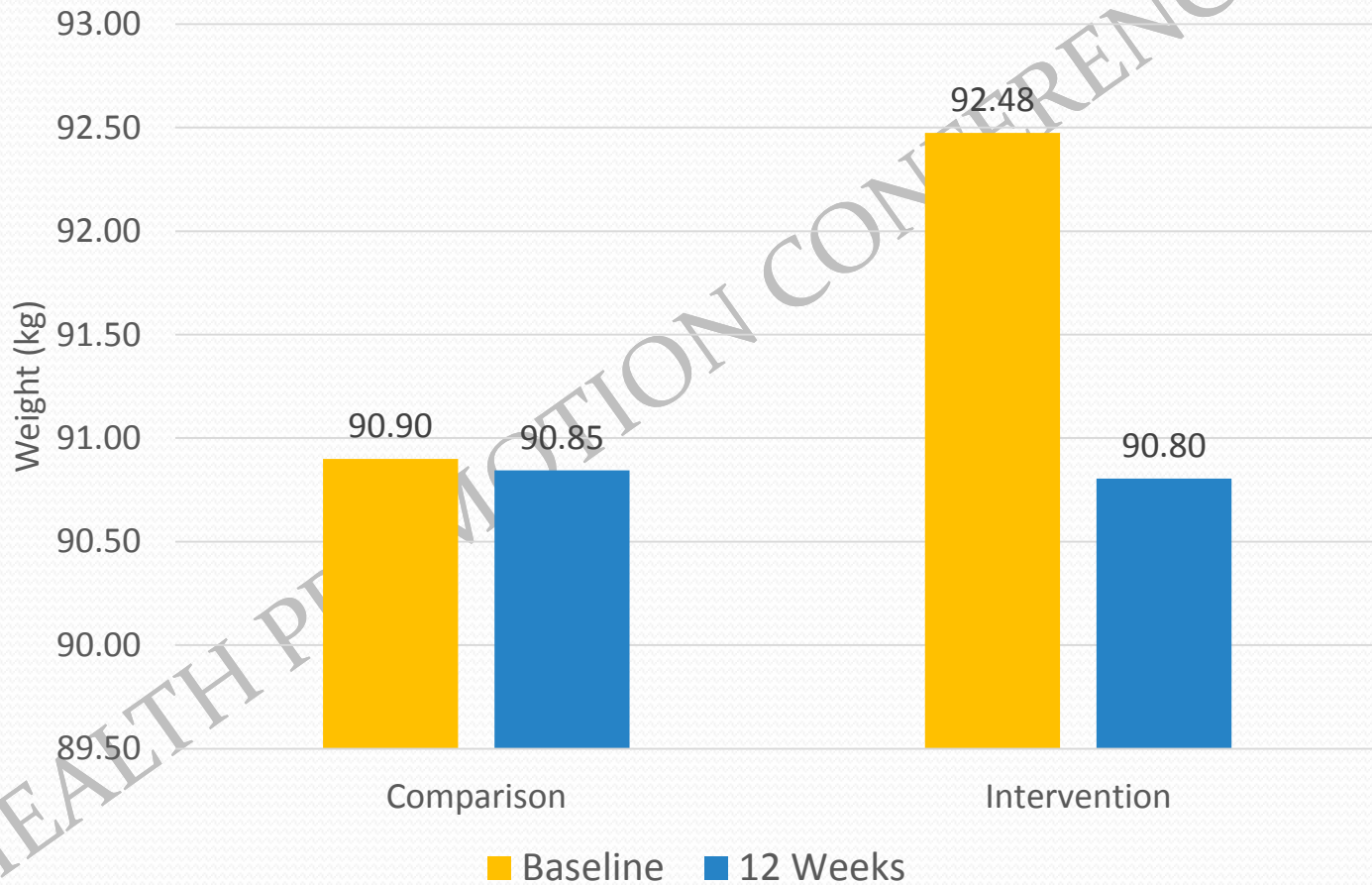
# Baseline Results: BMI & Waist Circumference

BMI Category	(n)	%
<b>Underweight</b> ( $<18.50$ )	1	0.10
<b>Normal</b> ( $18.50 - 24.99$ )	88	9.71
<b>Overweight</b> ( $25.00 - 29.99$ )	398	44.04
<b>Obese Class 1</b> ( $30.00 - 34.99$ )	292	32.33
<b>Obese Class 2</b> ( $35.00 - 39.99$ )	85	9.41
<b>Obese Class 3</b> ( $\geq 40.00$ )	40	4.40
<b>TOTAL</b>	<b>904</b>	<b>100</b>

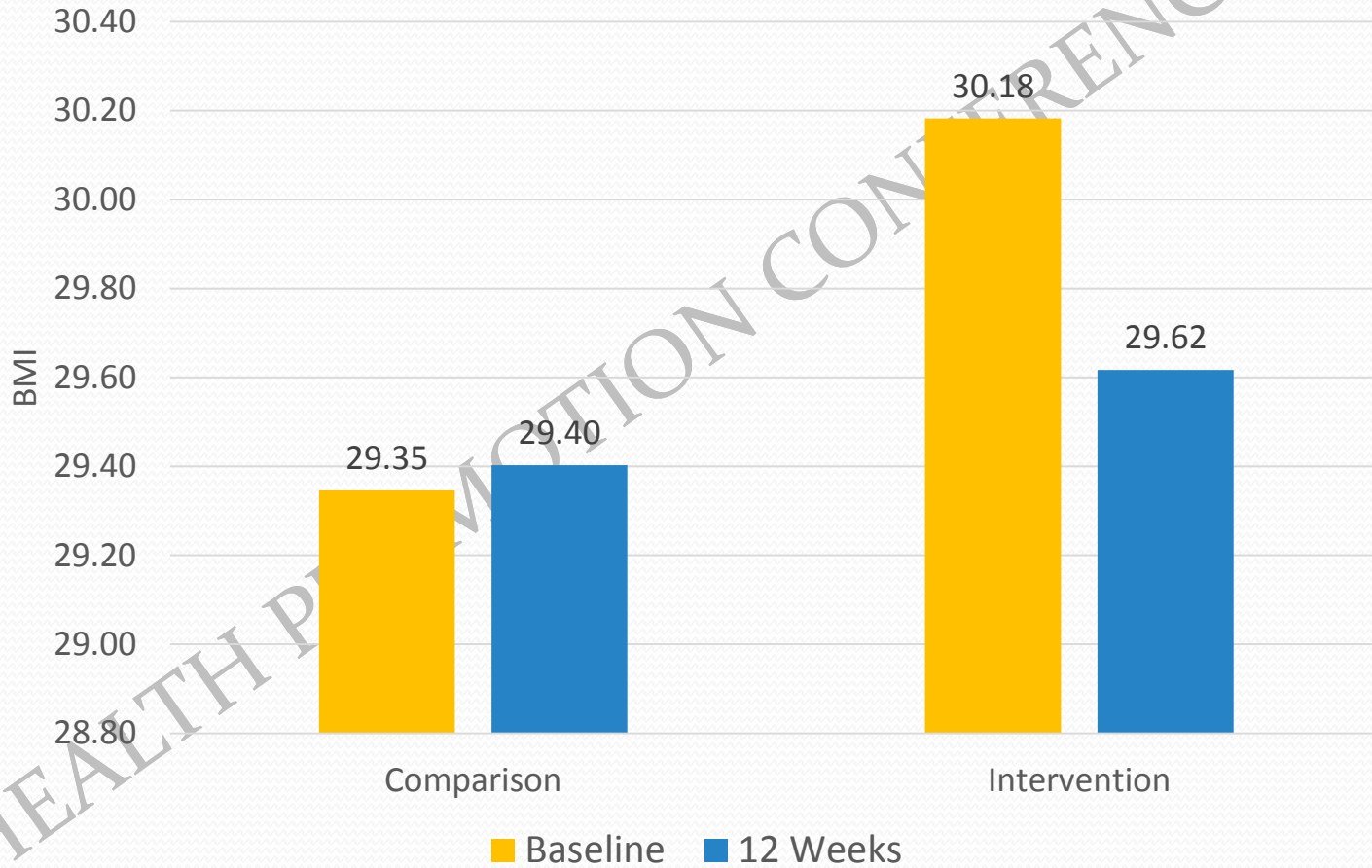
Waist Circumference Risk Category	(n)	%
<b>Healthy</b> ( $<94\text{cm}$ )	148	16.42
<b>Increased Risk</b> ( $94-102\text{cm}$ )	262	29.13
<b>High Risk</b> ( $>102\text{cm}$ )	490	54.45
<b>TOTAL</b>	<b>900</b>	<b>100</b>



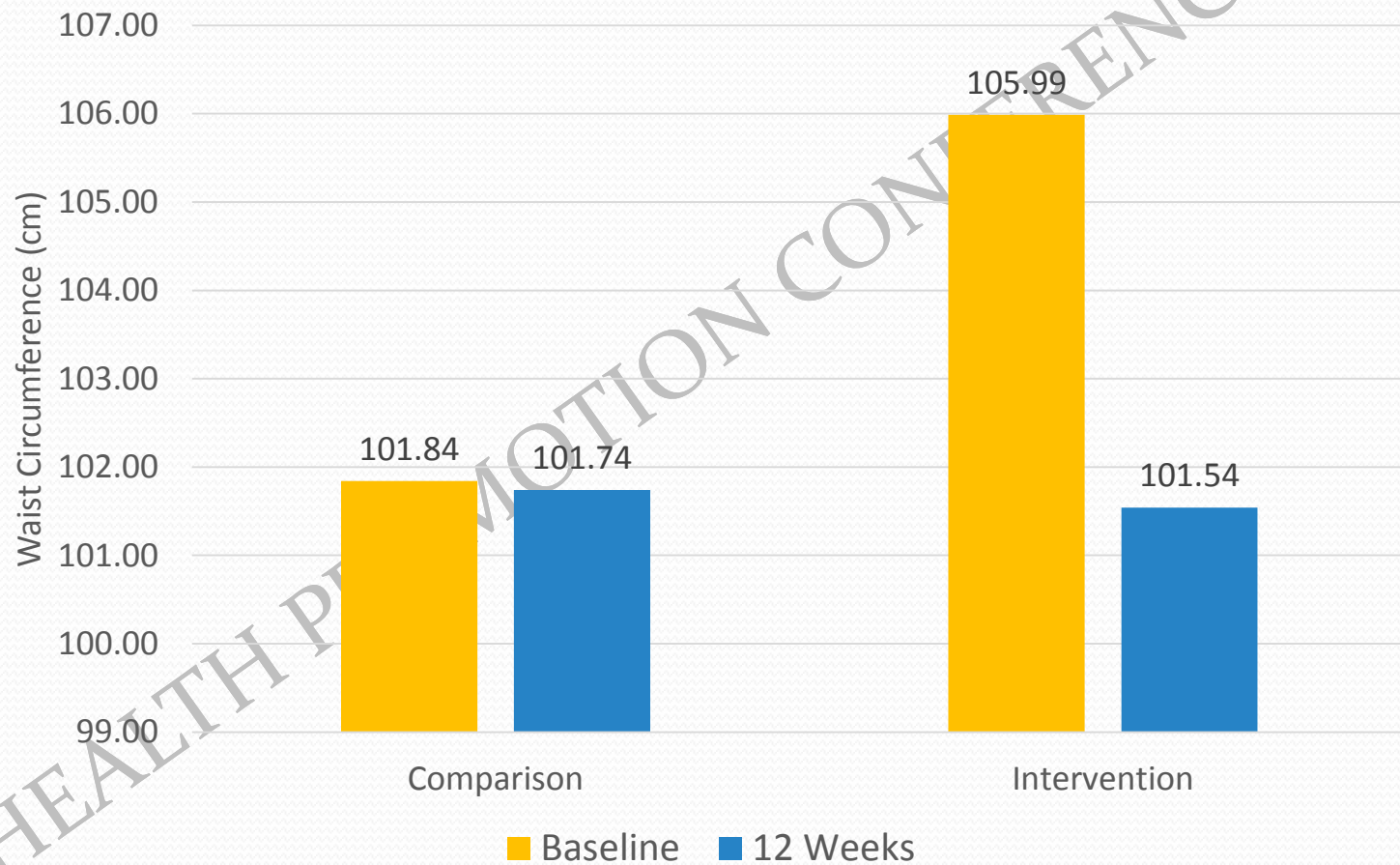
# Weight: Baseline vs 12 Weeks



# BMI: Baseline vs 12 Weeks

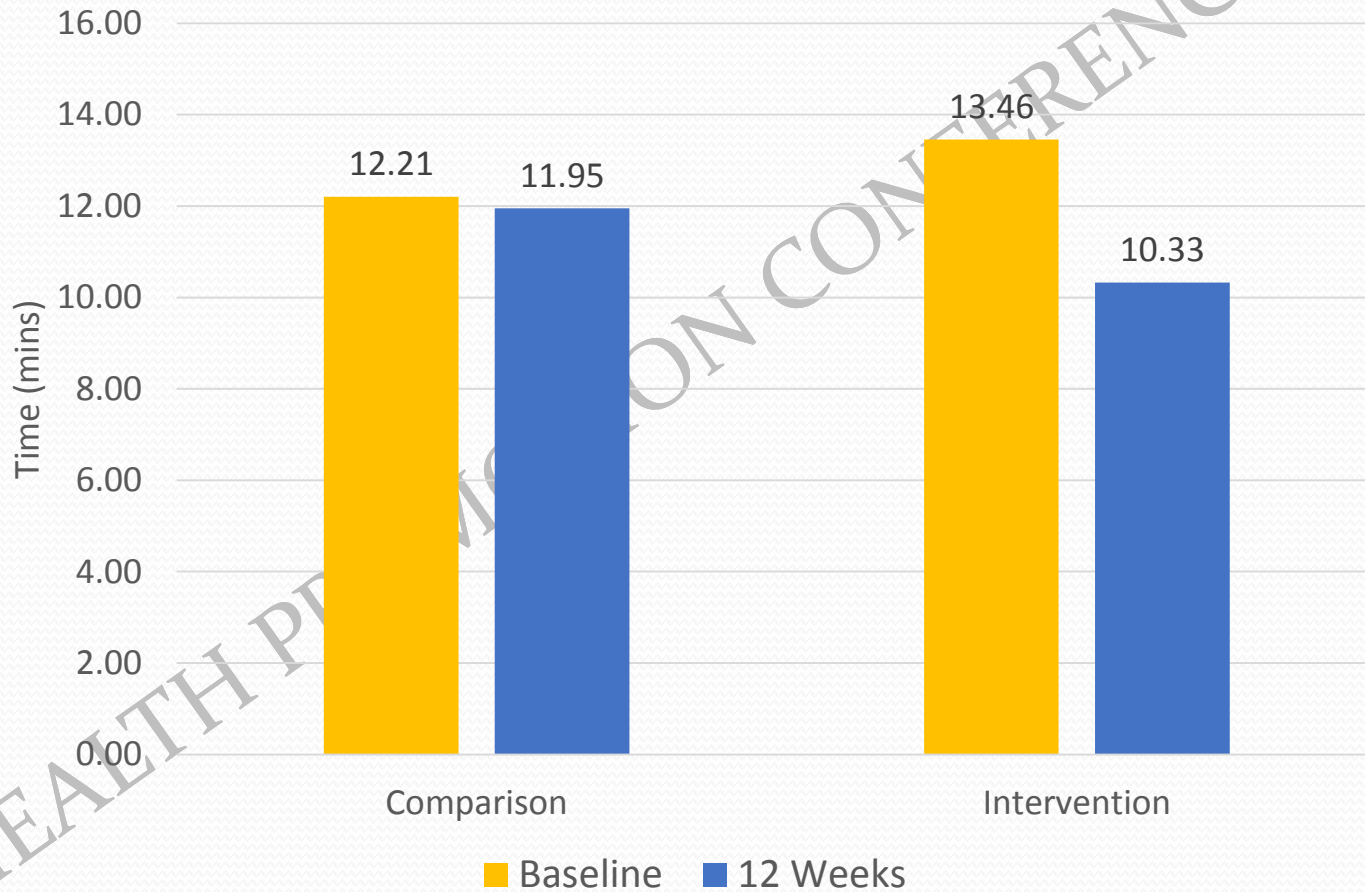


# Waist Circumference: Baseline vs 12 Weeks



2% change in risk equivalent to 1 cm change in circumference 8.88% (9%)

# Time-to-do 1 Mile: Baseline vs 12 Weeks



VO<sub>2max</sub> Estimate: 19.04ml/kg/min to 26.13ml/kg/min = 7.09ml/kg/min  
2 METS (30% reduction in risk)

# Summary of preliminary findings

Baseline results indicate that the programme succeeded in reaching its target population of men. Men who engaged in MoM predominantly overweight/obese.

**Just 10% of men recruited being of 'normal' weight;** considerably less the 30% reported in the latest statistics

(Department of Health: Healthy Ireland Survey 2015)

The proportion of men in the 'at risk' categories for BMI and waist circumference measurements is a cause for considerable concern.

Preliminary results indicated that the 12 week intervention programme has had an effect in reducing risk factors associated with increased weight and obesity.

# Conclusion

Increasing evidence suggests that gender-specific strategies are necessary in creating sustainable PA programmes that appeal to men.

Baseline data indicates that there is an urgent need for a more targeted and gender-specific programme that supports service providers to effectively engage inactive men in a PA programme.

MoM programme is the first step to establishing a nationwide programme that specifically targets inactive men.



# Men on the Move: In Partnership with...



PROMOTING SPORT & ACTIVE LIVING

Mayo Sports Partnership



Comhpháirtíocht Spóirt Mhaigh Eo  
An Irish Sports Council Initiative



# Men on the Move: Research Team

## **Paula Carroll**

Department of Health Sport & Exercise Sciences, Waterford Institute of Technology.

## **Noel Richardson**

The National Centre for Men's Health, Institute of Technology Carlow.

## **Michael Harrison**

Biomedical Research Group & Waterford Cardiovascular Research Group, Waterford Institute of Technology.

## **Steve Robertson**

Centre for Men's Health, Leeds Beckett University.

## **Aisling Keohane**

Department of Health Sport & Exercise Sciences, Waterford Institute of Technology.

## **Alex Donohoe**

Department of Health Sport & Exercise Sciences, Waterford Institute of Technology.

## **Liam Kelly**

The National Centre for Men's Health, Institute of Technology Carlow.



Waterford Institute of Technology  
INSTITIÚID TEICNEOLAÍOCHTA PHORT LAIRGE



LEEDS  
BECKETT  
UNIVERSITY