

# CAN POOR SLEEP AND SEDENTARY BEHAVIOUR TRIGGER A LOW BACK PAIN (LBP) FLARE?



**DO CHANGES IN PHYSICAL ACTIVITY AND SLEEP INCREASE THE RISK OF EXPERIENCING A LBP FLARE?**

## STUDY OF 112 INDIVIDUALS EXPERIENCING LBP FOR >3 MONTHS



**TWO ACTIVITY MONITORS WORN FOR 28 DAYS TO CAPTURE CHANGES IN ACTIVITY. DATA ON PAIN INTENSITY, SLEEP WERE GATHERED DAILY THROUGH AN APP.**

## FLARES WERE DEFINED IN 2 WAYS:



**PAIN DEFINED FLARES:**  
days in which pain was 2-points above the average pain level reported over the 28 days.



### **SELF REPORTED FLARE:**

Reported daily on the app when they experienced the following - "An increase in pain or other related symptoms that lasts from hours to weeks and is difficult to settle. You may also have mood changes and/or difficulty with your normal activity".



**WHEN PARTICIPANTS SLEPT POORLY OR LONGER (!) THE RISK OF FLARE WAS GREATER (REGARDLESS OF THE DEFINITION).**

**GREATER TIME SPENT IN SEDENTARY BEHAVIOUR AND LESS TIME SPENT UPRIGHT WERE ASSOCIATED WITH SELF REPORTED FLARE.**



**CHANGES IN PHYSICAL ACTIVITY AND SLEEP CAUSE FLUCTUATIONS IN BACK PAIN THAT ARE MEANINGFUL TO THE PERSON.**



**QUALITY, NOT QUANTITY, OF SLEEP IS IMPORTANT.**

**THIS REINFORCES THE POTENTIAL ROLE OF INTERVENTIONS FOR SLEEP AND PHYSICAL ACTIVITY TO PREVENT LBP FLARES.**