

## ABSTRAK

Pekerja di bidang penyosohan beras sering mengalami nyeri otot betis akibat aktivitas berdiri lama, yang berpotensi mengganggu keseimbangan tubuh. Intervensi seperti *Muscle Energy Technique* (MET) terbukti efektif dalam meningkatkan ekstensibilitas otot. Penelitian ini bertujuan untuk mengevaluasi pengaruh MET terhadap ekstensibilitas otot betis pada pekerja penyosohan beras di UD.JULI, Kecamatan Penebel, Kabupaten Tabanan. Penelitian ini menggunakan metode pre-eksperimental dengan sampel 10 orang pekerja berusia 45-64 tahun. Variabel bebas dalam penelitian ini adalah ekstensibilitas otot *gastrocnemius* dan otot *soleus* yang diukur dengan Goniometer dan *Knee To Wall test*, variabel terikat adalah *Muscle Energy Technique*. Penelitian ini menggunakan uji normalitas *Shapiro wilk test* dan didapatkan hasil nilai signifikan pre-test Lingkup Gerak Sendi menggunakan Goniometer *Dextra* Sig=0,191, *Sinistra* Sig=0,124 dan Post-test *Dextra* Sig=0,228, *Sinistra* Sig=0,087 dan pre-test *Knee To Wall Dextra* Sig=0,152, *Sinistra* Sig=0,191 dan post-test *Dextra* Sig=0,245, *Sinistra* Sig=0,177 yang berarti data berdistribusi normal. Uji Hipotesis menggunakan paired sampel t-test didapatkan hasil signifikan 0,000 yang menunjukkan adanya pengaruh pemberian *Muscle Energy Technique* terhadap peningkatan ekstensibilitas otot betis. Dapat disimpulkan bahwa *Muscle Energy Technique* dapat meningkatkan ekstensibilitas otot betis pada pekerja penyosohan beras dengan presentase sebanyak 47,91% *knee to wall dextra*, 60,13% *knee to wall sinistra*, 26,16% *dorso fleksi dextra*, dan 28,31% *dorso fleksi sinistra*.

**Kata Kunci : Ekstensibilitas, Otot Betis, Otot *Gastrocnemius*, Otot *Soleus*, Keseimbangan**

## **ABSTRACT**

*Workers in the rice polishing sector often experience calf muscle pain due to prolonged standing activities, which has the potential to disrupt body balance. Interventions such as the Muscle Energy Technique (MET) have been shown to be effective in increasing muscle extensibility. This study aims to evaluate the effect of MET on calf muscle extensibility in rice polishing workers at UD.JULI, Penebel District, Tabanan Regency. This research used a pre-experimental method with a sample of 10 workers aged 45–64 years. The independent variable in this study was the extensibility of the gastrocnemius and soleus muscles as measured by the goniometer and knee-to-wall test; the dependent variable was the muscle energy technique. This study used the Shapiro Wilk test and obtained significant pre-test results for joint range of motion using the goniometer Dextra Sig=0.191, Sinistra Sig=0.124, and post-test Dextra Sig=0.228, Sinistra Sig=0.087, and pre-test Knee to Wall Dextra Sig=0.152, Sinistra Sig=0.191, and post-test Dextra Sig=0.245, Sinistra Sig=0.177, which means the data is normally distributed. Hypothesis testing using a paired sample t-test obtained a significant result of 0.000, which shows the influence of the Muscle Energy Technique on increasing calf muscle extensibility. It can be concluded that the Muscle Energy Technique can increase calf muscle extensibility in rice polishing workers with a percentage of 47.91% knee to wall right, 60.13% knee to wall left, 26.16% right dorso flexion, and 28.31% left dorso flexion.*

**Keywords:** *Extensibility, Calf Muscle, Gastrocnemius Muscle, Soleus Muscle, Balance*