

Ricebag to treat soft tissue injuries

April 18 2013



University Teknologi MARA researchers investigated the effects of rice, barley and mung beans in heated bags for treating soft tissue

injuries. Rice displayed superior quality in maintaining heat and can act as a substitute to ice packs or heat gels in treating these injuries.

Researchers from the Faculty of Applied Sciences and the Faculty of [Sport Sciences](#) at University Teknologi MARA collaborated in a study to invent supplementary and better solutions to treat soft tissue and [muscle injuries](#). This study looked into the effectiveness of "Ricebag" which was heated and used to treat soft tissue injuries.

This bag is invented specifically for individuals in need of treatment for soft tissue or muscle injuries. Usually Ice and Heat (gel, cream, modalities (electrical) based) are used in managing soft tissue or muscle injuries (Prentice 2006). The use of Ice and Heat has been observed to give some negative effects. Hence, this rice bag has been invented as an alternative.

Local [rice grains](#) were used as raw material and covered with a special woollen fabric that is similar in strength to that of an icepack and is also able to sustain heat simultaneously. Rice, [barley](#) and mung beans were used in this study.



The grains and beans were washed and dried in sun light, and sterilization method began with these grains and beans which were roasted on a hot plate, to prevent germination. All grains and beans were treated under [UV light](#) for an hour. The grains and beans were packed into a bag using rib fabric, and these bags were 'cooked' using an [autoclave](#) (a machine that is suitable for pressure cooking) maintaining a temperature of 121°C for 15 minutes. A small hole was made on each bag (to fit a thermometer) to measure the grains and beans' heat

retaining capacity.

Rice displayed superior characteristic compared to barley and mung beans. In terms of fabric, the rib fabric which was used to make the bag is able to retain and maintain heat (5min + 155°C). The study proved that rice covered with fabric displayed similar characteristic of an ice and hot pack and acts as a substitute to help treat soft tissue injury.

Provided by Universiti Teknologi MARA (UiTM)

Citation: Ricebag to treat soft tissue injuries (2013, April 18) retrieved 27 April 2024 from <https://medicalxpress.com/news/2013-04-ricebag-soft-tissue-injuries.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.