



FOREWORD

MediTimes from the desk of Medical Services brings the latest trending healthcare news.

*The In focus latest medical news comprises of articles on **Stair climbing offers significant cardiovascular and muscular benefits** and **Vitamin B6 Status among Vegetarians***

*The COVID-19 infohub focuses on knowing about **COVID-19 Comparison of Vaccines***

The greens for health section, in this issue provides an insight about the health benefits of Lettuce.

Hope this May 2021 issue of Meditimes would be an informative reading

Happy Reading!!!

Best Regards,

Dr. Manjula S

Senior VP- Medical Services

LATEST MEDICAL NEWS



Stair climbing offers significant cardiovascular and muscular benefits



Vitamin B6 Status among Vegetarians

COVID-19 INFOHUB



COVID-19 Comparison of Vaccines

GREENS FOR HEALTH



Lettuce



FUN CORNER



DIMAG KI BATTI JALAO!



Stair climbing offers significant cardiovascular and muscular benefits for heart patients



A new study published in the *Journal Medicine & Science in Sports & Exercise* aimed to analyze the effectiveness of high intensity interval stair climbing on improving cardiorespiratory fitness which was compared to standard cardiac rehabilitation care.

With the help of Cardiac Health and Rehabilitation Centre, researchers developed an exercise protocol which could be easily performed outside a laboratory. Patients with heart disease were divided into traditional moderate-intensity exercise (TRAD) or high intensity interval stair climbing (STAIR). Researchers found that the participants who had done both type of exercises showed that there was an increase in cardiorespiratory fitness after 4 weeks of supervised training and maintained those levels for eight weeks of unsupervised training.

Author Dr Stuart Phillips says that whether moderate intensity, continuous training or high-intensity stair climbing, there were beneficial adaptations in muscles after a cardiac procedure,

The study showed that stair-climbing routines, vigorous or moderate, provide significant cardiovascular and muscular benefits for heart patients.

*Dunford EC, Valentino SE, Dubberley J, Oikawa SY, McGlory C, Lonn L, Young ME, Gibala MJ, Phillips SM, MacDonald MJ. Brief Vigorous Stair Climbing Effectively Improves Cardiorespiratory Fitness in Patients With Coronary Artery Disease: A Randomized Trial. *Frontiers in Sports and Active Living*. 2021 May 17; :2 .*



Vitamin B6 Status among Vegetarians



Vitamin B6 is also called as pyridoxine which helps the body to use and store energy from proteins and carbohydrates in food. A new study published in the Journal Nutrients aimed at assessing the vitamin B6 status among vegetarians and also pescatarians, flexitarians, compared to meat-eaters.

8968 adults aged 20–87 years were included in this study whose Vitamin B6 was examined based on the serum concentration pyridoxal-5-phosphate (PLP) and 4-pyridoxic acid (4-PA) and was measured by high-performance liquid chromatography (HPLC) as well as dietary intakes from 24-h recalls.

A team of researchers found that there was no significant difference among the groups and also noted that the use of vitamin B6 supplements were the strongest predictor of vitamin B6 status, followed by the dietary Vitamin B6 intake. Covariates such as serum albumin, creatinine and alkaline phosphatase were associated with vitamin B6 biomarkers levels.

This study showed that type of diet consumed does not affect Vitamin B6 serum concentrations. Good sources of vitamin B6 such as meat and fish is not required to achieve Vitamin B6 status. Vitamin B6 may not be a critical nutrient among vegetarians.

Schorgg P, Bärnighausen T, Rohrmann S, Cassidy A, Karaoglou N, Kühn T. Vitamin B6 Status among Vegetarians: Findings from a Population-Based Survey. Nutrients. 2021 May;13(5):1627.



COVID -19 Vaccine Comparison			
	Sputnik	Covishield	Covaxine
Candidate Vaccine Name	Gam-Covid-Vac/ Sputnik V	AZD1222	BBV152/Covaxin
Manufacturer (s)	Gamaleya Research Institute/Health Ministry of the Russian Federation /Acellena Contract Drug Research and Development	AstraZeneca/ Oxford University Manufactured in India by <i>Serum Institute of India</i>	Bharat Biotech
Phase 3 trials starting date	September 7 th 2020	August 2020	November 16 th , 2020
Number of Participants	40,000	32 ,449	25,800
Cold chain required for storage	Two presentations: 1.Frozen (-18°C) 2.Lyophilised (2-8°C)	2-8°C	2-8°C
Immunization regimen	0.5 ml per dose (2 doses- 3 weeks apart)	0.5 ml per dose(2 doses- 12 to 16 weeks apart)	0.5 ml per dose (2 doses- 4 weeks apart)
Date of Approval in India	Approved in India on 13 th April 2021	Approved in India on 3 rd Jan 2021	Approved in India on 3 rd Jan 2021
Interim reports efficacy	91.6%	76%	78%
<p>References:</p> <p>1)Kyriakidis NC, López-Cortés A, González EV, Grimaldos AB, Prado EO. SARS-CoV-2 vaccines strategies: a comprehensive review of phase 3 candidates. <i>npj Vaccines</i>. 2021 Feb 22;6(1):1-7.</p> <p>2)World Health Organization. Interim recommendations for use of the ChAdOx1-S [recombinant vaccine against COVID-19 (AstraZeneca COVID-19 vaccine AZD1222, SII Covishield, SK Bioscience): Interim guidance, first issued 10 February 2021, updated 21 April 2021. World Health Organization; 2021.</p> <p>3) Indian Council of Medical Research April 2021</p>			



Lettuce

Lettuce is a well known leafy vegetable which is primarily consumed in Salads. It belongs to *Asteraceae* family. Leaves of the plant form a dense head or loose rosette. The lettuce plant can vary in size, shape and leaf size.

Health Benefits

- Antioxidant
- Aids with Weight Loss
- Improves Digestion
- Helps lower Cholesterol
- Helps to prevent Insomnia
- Hydration

https://snaped.fns.usda.gov/seasonal_produce_guide/lettuce

Nutrition Facts

Serving Size:	1 cup lettuce, shredded (36g)
Amount per serving	
Calories	5
	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 10mg	0%
Total Carbohydrates 1g	0%
Dietary Fiber 1g	2%
Sugars 0g	
Includes 0g Added Sugars	0%
Protein 1g	
Vitamin D 0mcg	0%
Calcium 13mg	1%
Iron 0mg	2%
Potassium 71mg	2%

*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.





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Son: Father ,
can you write in the dark?

Father: Yes why not?

Son: Then please turn off
the lights and sign my
report card.



DIMAG KI BATTI JALAO



1. What is the other name of Sputnik vaccine ?
2. Lettuce leaves belongs to _____ family
3. No matter how many nails you write you will never get a reply. If you speak, you will get a reply
Who is this ?



Please send your quiz answers to dimag.julia@microlab.in or medicalsrvces@microlab.in and winner will get a surprise gift