# NUTRILICIOUS

"PART OF THE SECRET OF SUCCESS IS TO EAT WHAT YOU LIKE

AND LET THE FOOD FIGHT IT OUT INSIDE"





# THE EDITORIAL DESK

We are delighted to bring out maiden issue of compiled articles, food facts, reviews, research updates etc., in this Newsletter- **NUTRILICIOUS**, which is a culmination of student's effort.

I owe a heartfelt thanks to all the contributors and am privileged to be associated which constantly thrives upon high quality work. The comments received from the readers have helped to improve upon the quality of work. In the pursuit, I extend my immense gratitude to a very dedicated team of student-editors for their relentless and untiring efforts in this regard.

Lastly, I would like to express our heartfelt thanks to our beloved chairman Dr. Mohan Alva, our trustee Mr. Vivek Alva, Principal and Administrative Officer for their continuous guidance and motivation.

We sincerely hope that the readers will find the articles interesting, relevant and intellectually stimulating to build up a healthy eating habits with diverse foods.

# Happy reading!!!!

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# Vegetable of The Month: Cauliflower and Broccoli

#### **Health Benefits**

- Contains cancer protective compounds
- Supports hormonal balance
- Good source of Antioxidents
- Helps in weight loss
- Rich in Sulforaphane



# FRUIT OF THE SEASON

#### **JAVA PLUM**

#### **HEALTH BENEFITS**

- · Prevents the risk of anemia
- Improves health of skin and eyes
- Strengthens gums and teeth
- Improves cardiovascular health
- Prevents various types of cancer
- Boost immunity

Nutrients (100g)	Value
Energy (Kcal) Carbohydrates (g) Protein (g) Fat (g) Calcium (mg) Iron (mg) Phosphorous (mg) Potassium (mg) Vitamin (µg)	81 0.97 21.01 0.31 25.65 0.26 22.95 106.65 19.6

# JAVA PLUM FRUIT EXTRACT EXHIBITS ANTI – CANCER ACTIVITY AGAINST COLON CANCER CELLS AND COLON CANCER STEM CELLS

Colon cancer is the second leading cause of cancer related deaths in the United States. Colon cancer is caused by a step-wise accumulation of mutations in tumour suppressor and oncogenic genes resulting in the formation of polyps which ultimately needs to adenocarcinoma. Java is a tropical medicinal fruit rich in anthocyanins, which possess antidiabetic, anticancer, anti- inflammatory, antimicrobial and anti- obesity effects.

Conventional cancer treatment options normally fail to specifically target CSCs leading to relapse in majority of the cases. The bio- availability of anthocyanins is low and hence reach the intestine at high concentrations and it has been suggested that concentrations in  $\mu g/mL$  dose range in the colon are feasible.

Source: Cancers 2016, 8(3), 29

-ANKITHA SEQUEIRA I MSc (FSN)

# SCIENTIFIC VALIDATION OF THE ANTIDIABITIC EFFECT OF JAVA PLUM, A TRADITIONAL MEDICINAL PLANT OF INDIA

Java plum has been used in various complimentary and alternative systems of medicine and before the discovery of insulin, it was a frontline antidiabetic medication. This includes the validated antidiabetic effects of java plum and some of its compounds. Emphasis is also placed on addressing the various mechanisms of action contributing to the pharmacological effects. The brew prepared by boiling the java plum seeds in boiling water has been used in the various traditional systems of medicine in India.

Source: The Journal of Alternative and Complimentary medicine 19(3), 191-197, 2013

-Sushmitha P, I MSc (FSN)

### LIFE IS COMBINATION OF MAGIC AND PASTA.

# **Food Facts**

#### Nutmeg can cause hallucinations:

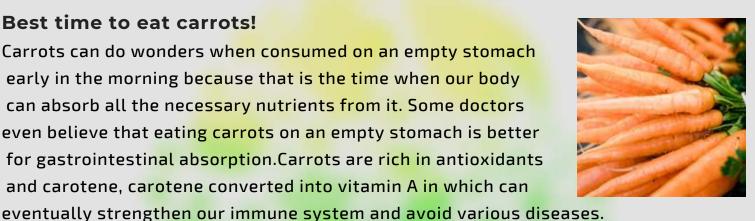


Too much of a spice can be a bad thing, and nutmeg is no exception. If you have two or more teaspoons of the spice, It can actually cause hallucinations!

- PRATIKSHA M.H I MSc (FSN)

#### Best time to eat carrots!

Carrots can do wonders when consumed on an empty stomach early in the morning because that is the time when our body can absorb all the necessary nutrients from it. Some doctors even believe that eating carrots on an empty stomach is better for gastrointestinal absorption. Carrots are rich in antioxidants and carotene, carotene converted into vitamin A in which can



-IORA I MSc (FSN)

#### Did you know kiwifruit could also be used as a natural meat tenderizer?



kiwifruit contains an enzyme called Actinidin. Just cut in half and rub kiwifruit over the meat, or peel and mash with a fork then spread it on the surface of the meat and let stand for 10 to 15 minutes or longer. The enzyme Actinidin also breaks down protein in dairy products -IQRA I MSc (FSN)

### Why does chapathi swells up on cooking?

In the process of making chapati, dough sheets are first partially baked from both the sides and then put directly on flame. During partially baking of dough sheet, surface denaturation of protein and removal of moisture from surface takes place. Thus hard cover is formed from both side, but the inside of sheet is still full of moisture. When the sheet is placed directly on the flame, due to high temperature the moisture from within the sheet vaporizes, and try to expand.

-VANDHANA II MSc (FSN)

# **Research updates:**

New Health Benefits Of Red Seaweeds Unveiled. The study explains why red seaweeds are beneficial by providing the molecular mechanism.

In the study, the researchers broke down the structure of different types of red seaweed using enzymes and tested the sugars that were produced to see which one of them caused health benefits. After they produced these sugars, the researchers tested their prebiotic activity using the bacteria Bifidobacteriumlongum ssp. infantis, it is a probiotic bacterium; it colonizes the gut of infants and improves the growth of probiotic bacteria. And releases these sugars which serve as food for the probiotic bacteria.

Source: Carl R. Woese Institute for Genomic Biology, University of Illinois.

-IQRA I MSc (FSN)

# REPLACING RED AND PROCESSED MEAT WITH MUSHROOMS LINKED TO A LOWER RISK OF EARLY DEATH

Replacing a daily serving of red or processed meat with one serving of mushrooms lowers the risk of dying from any cause. Results showed replacing one daily serving of red/processed meat with mushrooms was associated with a lower risk of all-cause mortality when compared to those who did not eat mushrooms. A possible mechanism for the reduced risk includes the antioxidant properties of ergothioneine and glutathione, compounds associated with high mushroom intake. These findings showed a protective effect of these same antioxidants against breast cancer.

**SOURCE: Nutrition Journal** 

-PRATHIKSHA I MSc (FSN)

# Kaempferol as a potential inhibitor of the SARS- CoV-2 main protease (3CLpro)

Protease is 3-Chymotrypsin-like protease (3CLpro) which plays an important role in cell proliferation and maturation. Kaempferol, a natural flavanoid which is found in quinoa, beans, kale, lettuce, onions. Kaempferol is stable in the 3CLpro cavity and acts as a inhibitor. From the studies made, it is noticed that Kaempferol has been able to protect cells from virus induced cell death and could be a promising SARS – CoV -2 anti-viral drug.

Source: Phytother Res. 2021 Jan 15: 10. 1002/ptr. 6998.

-DIVYA I MSc (FSN)

Cakes are healthy too, you just eat a small slice.

### \*Fortification & Enrichment\*- Vitamins & Minerals



# Vitamin A,D,K (100g) Peas and carrot dosa:

#### reas and carrot dosa

- Energy-1001.8Kcal
- Vitamin A- 740.5mg

#### Egg banana pizza:

- Energy- 236.9Kcal
- Vitamin D- 8.2mg

#### Brinjal tamarind curry:

- Energy- 103.29Kcal
- Vitamin K- 20.02mg

#### **Health Benefits**

- Supports immune system
- Maintains bone health
- Acts as antioxidant
- Prevents blood clotting
- Lowers the risk of heart diseases

### **Health Benefits**

- Helps to manage high blood pressure
- Lowers the risk of Heart diseases
- Prevents Iron deficiency
- Boosts Immunity

# Vitamin C (100g) Orange Poha:

- Energy- 323.7Kcal
- Vitamin C: 79.7 mg

#### **Lemon Coriander Soup:**

- Energy-89.65Kcal
- Vitamin- 137.35mg

#### **Cornflakes Fruit Chat:**

- Energy-158.2Kcal
- Vitamin- 33.5g

#### **Carrot Orange Salad:**

- Energy-133Kcal
- Vitamin C-17mg



### **Health benefits**

- Improves bone health
- reduces blood pressure
- Prevents cavities
- Supports brain health

# Mineral- Calcium (100g) Calcium energy balls:

- Energy-438.3Kcal
- Calcium- 216mg





### Mineral-Iron (100g)

#### Pomegranate apple milkshake:

- Energy- 578.5Kcal
- Iron- 9.37mg

#### Beetroot methi chapathi:

- Energy- 378.4Kcal
- Iron- 6.22mg

#### **Health Benefits**

- Treats anaemia
- Boosts haemoglobin
- Improves muscle endurance
- Restores sleep

# **Ongoing Departmental Work**

### **Authoring the following books:**

- A Text Book on Community Nutrition by Ms Ashwini. K and Dr Archana Prabhat
- Healthy recipes of south west costal Karnataka by Mrs Supriya
   Shirol and Dr Archana Prabhat
- Development of Choco- Banana Dragee and Study on Shelf life by Mrs Supriya Shirol and Dr Archana Prabhat (on progress)

# Paper Published:

 Effect of skipping breakfast on nutritional status and cognitive function of school going children's. A comparative study-The Indian Journal of Nutrition and Dietetics

## **Departmental Achievements:**



Jesna Vijay Batch (2019-20) Gold Medalist Manglore University



Dr Archana Prabhat
IAPEN National award winner

# **Departmental Activities:**



