

VOLUME 5

MARCH 2022

NUTRILICIOUS

"EAT FOOD. NOT TOO MUCH. MOSTLY PLANTS"

FRUIT OF

THE SEASON

PASSION FRUIT



FOOD FACTS

RESEARCH UPDATES

BREAKING BARRIERS

DEVELOPMENT OF
NUTRI PRODUCTS

DEPARTMENT OF PG
STUDIES IN FOOD
SCIENCE & NUTRITION
ALVA'S COLLEGE, MOODBIDRI



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Department website

EDITOR'S NOTE

Health is on everyone's mind due to the global pandemic which is still threatening our lives. In a sense, Covid-19 has made all of us much more aware of the roles and responsibilities of our profession than we were before. Moving through this pandemic, our department has come up with another maiden issue of NUTRILICIOUS- Women's special hss interesting, relevant and intellectually inspiring food facts all interwoven to lead a healthier life...

I wholeheartedly express my thanks to our beloved chairman Dr. Mohan Alva, our trustee Mr. Vivek Alva and Principal for their continuous guidance and motivation.

Happy reading!!!

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FRUIT OF THE SEASON

PASSION FRUIT

Nutrients (100g)	Value
Energy (Kcal)	54
Carbohydrates (g)	12.4
Protein (g)	0.9
Fat (g)	0.1
Calcium (mg)	10
Iron (mg)	2.0
Potassium (mg)	348
Phosphorus (mg)	60
Vitamin C (μg)	25

HEALTH BENEFITS

- Improve insulin sensitivity
- Reduces blood glucose level
- Reduce anxiety
- Improves cardiovascular health
- Prevents the risk of cancer
- Boost immunity

Efficacy of Purple Passion Fruit Peel Extract in Lowering Cardiovascular Risk Factors in Type 2 Diabetic Subjects

Purple passion fruit peel extract(a flavonoid-rich dietary supplement)Forty-one subjects were randomly assigned to receive a daily dose of purple passion fruit (220 mg) or a matched placebo for 16 weeks. Body mass index, blood pressure, fasting and postprandial blood glucose, glycated hemoglobin, and lipid profile were determined at baseline and at monthly intervals. A significant reduction in systolic blood pressure and fasting blood glucose was observed, indicating that purple passion fruit is safe and well tolerated by diabetics.

Source: Journal of evidence based integrative medicine 6 February, 2013

Effect of the yellow passion fruit peel flour in insulin sensitivity in type 2 diabetes mellitus patients

Yellow passion fruit peel flour showed positive action in blood glucose control as therapies' adjuvant in patients with type 2 diabetes mellitus. There was a significant difference in the fasting blood glucose values and glycated haemoglobin after supplementation. The supplementation used decreased insulin resistance in type 2 diabetic patients, suggesting a positive action.

Source: Nutrition Journal volume 11, Article number: 89 (2012)



Food Facts



Fruit snacks and cars are coated in the same type of wax.

Did you ever wonder how gummy candies get that glossy sheen? They're coated with carnauba wax, the same stuff that is used on cars to make them shiny.

- Sushmitha P II year MSc

Crackers have holes in them for a reason

During the baking process, if the crackers have holes in them, it prevents air bubbles from ruining the product.

-Pratikhsha II year MSc



Peppers don't actually burn your mouth.

There's a chemical in chili peppers called capsaicin that tricks your mouth into feeling like it's being burned – that's why spicy food hurts. The pain is all in your head!

-Iqra II year MSc

Muscle weighs more than fat.

The truth: "Unless the laws of physics have changed, one pound is one pound is one pound.". "The difference is that muscle is denser than fat, so one pound of muscle takes up less space than a pound of fat."

- VISMAYA P.V I year MSc



Edible oysters don't have pearls

The oysters you eat are a different species from the ones that bear pearls. The kind that are eaten are called ostreids, and the pearl-producing oysters are called Pterioida.

- SriKanta Prasad II year MSc

RESEARCH UPDATES

Biohacking-Embedding microchip inside a human body

Biohacking is a practice of optimizing one's body and mind with the incorporation medical, nutritional and electronic techniques. As a word, it suggest Bio and hacking which means the application IT hacks to the biological system. From the past, many years we are using heart pacemakers to analyze heart rates reduce irregular heart rates.

Source: JETIR May 2021, vol 8

The effect of Aswagandha ,ginger and mulberry on hyperglycemia and hyperlipidemia

The nutrient and antinutrient compositions of roots of aswagandha, rhizomes of ginger and leaves of mulberry were studied. The effects of supplementation of these three compounds on blood glucose and serum lipid levels were investigated. Diabetes and hypercholesterolemic subjects were treated with one of these three compounds at a dose of 3 g/day for a period of 30 days. A significant reduction in blood glucose, total cholesterol, triglyceride and increase in HDL cholesterol was noted.

Source: Plant foods for Human Nutrition, 58:1-7,2003

Effect of Aqueous Extract of Truffle on Some Antioxidants in Rats Exposed to Oxidative Stress induced by Hydrogen peroxide

The current study dealt with using of hydrogen peroxide with 0.5% with drinking water to induce state of oxidative stress in male rats and estimate the ability of different concentrations of the aqueous extract of Truffle Water Extract to reduce the effects of oxidative stress during periods. The results revealed slight protection from the oxidative stress induced by Hydrogen peroxide.

Source: Journal of Nutritional Biochemistry 13 (2002)

Medicinal prospects of antioxidants

Free radicals generated due to exposure of radiation, environmental pollutants and as by-products of metabolised drugs. Antioxidants are the substances which inhibit oxidation. They are moreover acknowledged as "free radical scavengers" as they form minor reactive species via radicals. An Antioxidant reduces the occurrence of different disorders like: aging, cancer, diabetes, inflammation, liver disease, cardiovascular disease, cataract and nephrotoxicity and neurodegenerative disorders. Dietary antioxidants are thought to have potential capacities to avert oxidative anxiety induced diseases.

Source: European Journal of Medicinal Chemistry, vol 178, 15 sept 2019

RESEARCH UPDATES

Pesticides and cancer

Many pesticides are carcinogenic, while others are the organochlorines DDT, chlordane, and lindane are tumor promoters. In humans, arsenic compounds and insecticides used occupationally have been classified as carcinogens by the International Agency for Research on Cancer. Epidemiologic studies, although sometimes contradictory, have linked phenoxy acid herbicides or contaminants in them with soft tissue sarcoma (STS) and malignant lymphoma; non-Hodgkin's lymphoma (NHL), leukemia, and, less consistently, with cancers of the lung and breast; and herbicides with ovarian cancer. A detailed exposure assessment is required for individual pesticides, taking into consideration work practices, use of protective equipment, and other measures to reduce risk.

Source: [springer link](#)

Effects of an Sea buckthorn juice on risk factors for coronary heart disease in humans

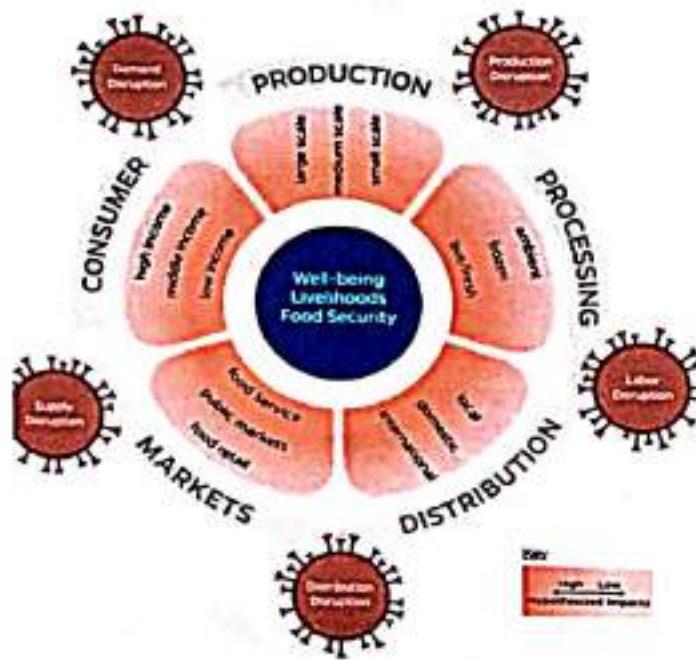
The study characterizes the antioxidant profile of Sea buckthorn juice (SBJ) and to evaluate its effect on plasma lipids, LDL oxidation, platelet aggregation and plasma soluble cell adhesion protein concentration. Twenty healthy male volunteers were given SBJ for 8 weeks. Increase in plasma HDL-C and triacylglycerol concentrations were observed. SBJ supplementation also resulted in a moderate decrease in the susceptibility of LDL to oxidation.

Source: *Journal of Nutritional Biochemistry* 13 (2002)

Effect of Dietary Protein Supplements on Calcium Excretion in Healthy Older Men and Women

Isocaloric diets were maintained by advising subjects to reduce their intake of carbohydrates. The high protein group had significantly lower levels of urinary N-telopeptide ($P = 0.038$). Increase protein intake from 0.78 to 1.55 g/kg·d with meat supplements in combination with reducing carbohydrate intake did not alter urine calcium excretion, but was associated with, a bone growth factor, and lowered levels of urinary N-telopeptide, a marker of bone resorption. Increased protein intake results in calcium wasting, meat supplements, when exchanged isocalorically for carbohydrates, may have a favorable impact on the skeleton in healthy older men and women.

Source: *The Journal of Clinical Endocrinology & Metabolism*, Volume 89, Issue 3, 1 March 2004



Source: *Global Food Security*, Vol 28, Mar 2021.



Breaking Barriers: Inspiring Indian Women Entrepreneurs in Food and Beverage Industry



Rashmi Daga

Is the founder and owner of one of Food-tech companies— Fresh Menu. Aimed at rescuing food-seekers from mundane meals, Fresh Menu is on a constant quest to whip-up interesting food options in the kitchen's spread out across the city that deliver freshly-cooked food to the doorsteps of its customers.

Uppma Vridi

She is also called Chai Walli is making the humble Indian cuppa very popular in Australia. She won the title of Businesswoman of the Year at the 2016 Indian Australian Business and Community Awards (IABC). The young entrepreneur is a full-time lawyer and a part-time tea maker in Melbourne.



Meenakshi Raju

She is working with various state governments in India to introduce microbreweries, a new concept to the hospitality sector. Created and launched the first of its kind microbrewery/restaurant in Bangalore in 2011 under the name "The Biere Club", which is successfully running for close 7 years.



Sonal Holland

She is an Indian Master of Wine and also first recipient of Master of Wine title in country. She is a certified wine educator, a consultant, retailer, broadcaster, and the founder of India Wine Awards, considered India's most authoritative wine competition.



Women are the real architects of society

Women's day special

Epidemiologic characteristics of women with uterine fibroids: a case-control study.

Risk factors for uterine fibroids were analyzed in a hospital-based case-control study based on 275 women with histologically confirmed fibroids and 722 controls with acute hormone-related conditions. Women with fibroids tended to have an earlier age at menarche and at the last birth, to be more educated, and to use intrauterine devices and oral contraceptives more frequently, although these findings were not statistically significant. Current smoking (but not past smoking) lowered the fibroid risk by about 40%. No associations were found with BMI, abortions, and age at first birth.

Diet and nutrition in polycystic ovary syndrome (PCOS): Pointers for nutritional management.

PCOS patients are not always markedly overweight but PCOS is strongly associated with abdominal obesity and insulin resistance. Effective approaches to nutrition and exercise improve endocrine features, reproductive function and cardiometabolic risk profile – even without marked weight loss.

Recommendations:

- Restriction of Fat to $\leq 30\%$ of total calories and a low proportion of saturated fat
- High intake of low GI carbohydrate contributes to dyslipidemia and weight gain and also stimulates hunger and carbohydrate craving.
- Use of drugs to either improve insulin sensitivity or to promote weight loss exercise.

Did you know there are also colours for the day?

The three colours are purple, green and white. Purple signifies justice and dignity, green symbolizes hope and white represents purity, which was slightly marred by controversy. The colours originated from the Women's Social and Political Union (WSPU) in the UK in the year 1908.



International WOMEN'S DAY 2022

International Women's Day 2022: Significance

International Women's Day is celebrated keeping in mind things like making people aware of giving respect and love to women and making women aware of their rights. This day is of great importance to raise the spirits of women and remove the inequality spread in the society.

Development Of The NUTRI Products

(Dec 2021 - Mar 22)



Crackers

ENERGY	48.41Kcal
CARBOHYDRATES	7.46 g
PROTEIN	0.97 g
FAT	1.69 g
FIBRE	0.15 mg

Health benefits

- purifies blood
- Improve digestive process
- It promote weight loss
- Reduce inflammation



Horse Gram Chakli

ENERGY	121.17Kcal
CARBOHYDRATES	13.59 g
PROTEIN	2.88 g
FAT	6.13 g
FIBRE	0.56 mg



Smart Cookies

ENERGY	29.737Kcal
CARBOHYDRATES	3.929 g
PROTEIN	0.35 g
FAT	1.40 g
FIBRE	0.084 mg

Health benefits

- Improves skin tissue and reduce wrinkles.
- Helps in keeping the blood sugar in check
- Helps to improve hemoglobin level's.
- It helps to reduce anxiety.

Choco Bajra Cookies

ENERGY	130Kcal
CARBOHYDRATES	22.4 g
PROTEIN	1.9 g
FAT	4.3 g
CALCIUM	38.9 mg
IRON	1.8 mg



Iron Balls

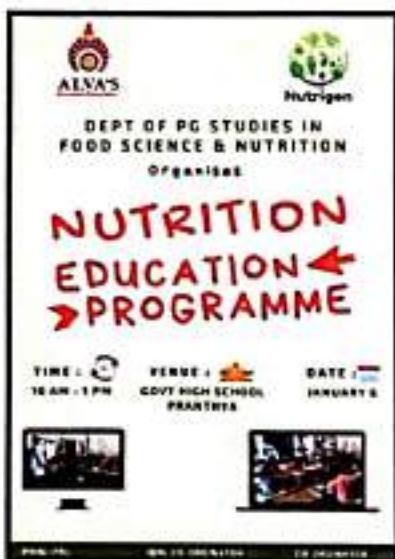
ENERGY	58.73Kcal
CARBOHYDRATES	6.6 g
PROTEIN	1.9 g
FAT	2.97 g
IRON	1.22 mg

Health benefits

- Good for brain functions
- Helps in healthy bone structure.
- Good for skin. Good for eyes.
- Fights inflammation.
- Diabetic friendly Helps in blood clotting.
- Protects heart.
- Reduces the risk of Breast cancer.

Departmental Activities

Nutrition Education Program



Departmental Activities

Alumni Association Activity

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A PROGRAMME UNDER IQAC
DEPARTMENT OF PG STUDIES IN
FOOD SCIENCE & NUTRITION

ALUMNI
ASSOCIATION ACTIVITY

9:30 am | December 20, 2021
Google Meet

Topic: VERY LOW KETONIC DIET
ALL ARE INVITED

POOJA A. H
Monetary & Student Division
Product People Management

Panel On The Waves

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DEPARTMENT OF PG STUDIES IN
FOOD SCIENCE & NUTRITION
PRESENTS
'PANEL ON THE WAVES'
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ANUWATI JAMES D'SOUZA
FOOD SAFETY & QUALITY OFFICER
SANTO SOUL, MUMBAI

ARITH
HEAD OF THE DEPARTMENT
DEPT OF PG STUDIES IN
FOOD SCIENCE & NUTRITION

PRINCIPAL
ZOBC CO-ORDINATOR
PO SEMINAR HALL
10 AM
PO SEMINAR HALL
2PM, JANUARY

PRESENCE
Prof. BALAKRISHNA SHETTY
AP, ALVA'S COLLEGE

Webinar

ALVA'S COLLEGE
A PROGRAMME UNDER IQAC
DEPARTMENT OF PG STUDIES IN FOOD
SCIENCE AND NUTRITION
(A PROGRAMME UNDER IQAC)

Organises

WEBINAR ON
TRADITIONAL INDIAN INGREDIENTS TO
MANAGE METABOLIC DISORDERS

RESOURCE PERSON:
MR HARSH DOSHI
founder of HaTa Bevtec Pvt Ltd, Daman

TARGET GROUP:
FSN STUDENTS

TIME: 3 TO 4 PM
VENUE: PG SEMINAR HALL
DATE: 07/01/22

ALL ARE CORDIALLY INVITED

PRINCIPAL IQAC CO-ORDINATOR CO-ORDINATOR



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

