

THE CELIAC SOCIETY OF INDIA PRESENTS

WHEAT VIEWS

NOVEMBER 2021
ISSUE 01 / VOLUME 05



THE GREENY GOODNESS OF JACKFRUIT

This vegetarian's 'meat' is your ticket to a meal replete with nutrients!

pgs. 3 and 4

A GLUTEN-RICH DIET IS NOT CHILD'S PLAY

The years that are most crucial to protect kids from celiac disease

pg. 5

GLUTEN-FREE TEA CAKES & PARATHAS

Recipes for gluten-free living, curated by the Celiac Society of India

pgs. 7 and 8

EDITOR'S NOTE



Ishi Khosla is a practicing clinical nutritionist, columnist, author, researcher and an entrepreneur. She's authored several books, including *Eating at Work*, *Is Wheat Killing You?* and *The Cholesterol Facts*. She is the founder of the Celiac Society of India, which has been instrumental in creating widespread awareness of wheat-related disorders. Ishi has been felicitated by the President of India for her work in the field of nutrition, and has been listed among the 25 most powerful women in India by the India Today Group.

Dear Reader,

Post Diwali, it's like the pandemic never existed. Shops are open, traffic is rampant, and party season has resumed with its usual tenacity. Despite this, the fear is not gone. The pandemic has created a set of 'new' normals, especially in the health space where COVID appropriate behaviours, vaccinations and immunity building diets stand out. So, flip to our case study that highlights the need to eat clean post vaccination and build resilience.

The pertinent question that's leading the changing trend in dietary choices – What's On Your Plate – will always make you think twice before loading up on a post-Diwali sweetmeat. Fasting and gut health have claimed the spotlight and there is a fascinating resurgence of Ayurveda as well as other traditional forms of medicine and foods, making this a perfect time to celebrate the 'vegetarian's meat' – the curious jackfruit. Humble, pungent and stuffed with gut-friendly fibre that can replace grains, it is not a fruit to be ignored.

Another issue we're 'not kidding' about is the importance and timing for infants and wheat-related disorders in children that can be prevented via early feeding practises. The time is now. So let's get it right and pass on our learnings to subsequent generations – I call that a dietary legacy!

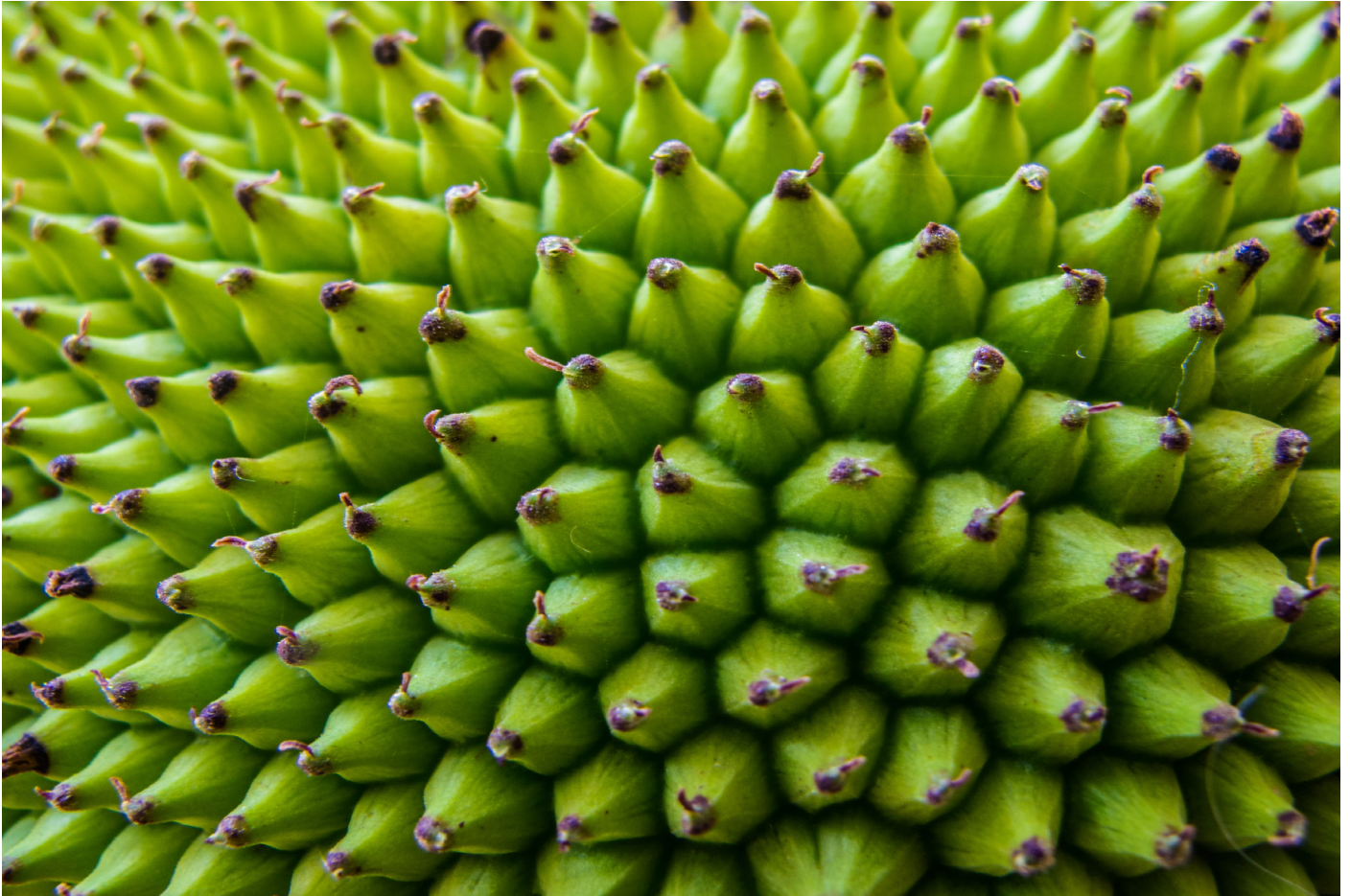
Best wishes for a safe 2022 and a blessed festive season ahead.

Ishi

Ishi Khosla

GETTING JACKED

The greeny goodness of jackfruit and the fascinating variety of food avatars it assumes from flour to chips is not to be underestimated.



Jackfruit, also called *kathal* in Hindi is a large irregular-shaped oval fruit. Often listed among the exotic tropical fruits originated in India, Malaysia it is also now grown in in Asia, Africa, the United States and Australia.

Reported to be the food of the Orangutans — it can weigh from 4kgs upto 20kgs — jackfruit has an interesting sweetish fibrous texture that is also meaty. It comes as no surprise when you consider just how many vegetarians use this fruit as a meat substitute to satiate their cravings for real meat. As pungent as it is, ripe jackfruit has a bland flavour and is a bit sweet. It is often peeled before consumption and can be had raw, boiled, roasted, fried or in a curry.

This fruit is rich in protein, starch (carbohydrate), calcium, vitamin A, B, C, copper and potassium. Though high in carbohydrates (80%), it has a low glycaemic index owing to its high fibre (11%) and nature of starch, which is of a resistant kind.

Being high in fibre, it aids digestion and its mucilaginous pulp has been found to be useful in boosting immune system. Other benefits include improving thyroid function, anti-cancer benefits, skin and vision improvements, lowering blood pressure and increasing sperm count.

Many people avoid jackfruit as they believe it is high in calories and carbohydrates. Contrary to this, jackfruit can be eaten by those trying to lose

weight simply because it helps you keep energised, full and satisfied for longer. Not only this it helps provide antioxidants like vitamin C, flavonoids, phytonutrients and potassium which can boost skin and immune function. In fact, the jackfruit seeds which resemble chestnuts have much higher anti-oxidant capacity than the edible portion.

Several studies have reported various health benefits of jackfruit including its role management of type-2 diabetes and obesity. In one study, the extracts of jackfruit significantly improved glucose tolerance in both normal and diabetic patients. Jackfruit has also been found to be having anti-ulcer effects and useful for those with heartburn, asthma and breathing disorders. Studies have also explored anti-inflammatory role of jackfruit, which can be important for the prevention of the progression of obesity associated low-grade inflammation and its complications. The seeds can be eaten roasted or boiled. Roasted dried seeds are also ground to make flour, which is blended with regular flour.

At present, there is a growing interest in research arena in the functional properties of jackfruit and its derivatives such as wafers, chips, seeds, flour, peel etc. It could very well be categorised as a functional food owing to its immense concentration of bioactive phyto-nutrients with powerful anti-

Jackfruit plays an effective role in the management of type 2 diabetes and obesity, say several studies.

inflammatory and disease fighting effects, which can play a vital role to cure and improve health.

India being the largest producer of jackfruit in the world has shown various ways of its consumption — from raw to ripe, of its fruits, seeds, and leaves. It has been found that consumption of green



jackfruit flour plays a role in managing the levels of plasma glucose in those who are diabetic, the requirement being “one tablespoon per person per meal for all three meals”. It also helps to reduce the risks of type-2 diabetes.

In a study published by Dr. A. Gopal Rao, Dr. A. G. Unnikrishnan, Dr. K. Sunil Naik and James Joseph in February 2020, it was seen that the patients who were supplemented with jackfruit flour had a lower mean glycosylated haemoglobin (HbA1c) after 12 weeks of its consumption than those who consumed placebo flour. This nutritional intervention was incorporated into traditional home-cooked staples like roti and idli.

The efficacy of a patented product derived from 100% mature green unripe jackfruits of India, called the Jackfruit 365 green jackfruit flour was evaluated, as an integral element of everyday meal in patients having type-2 diabetes. Decreasing mean blood glucose levels was seen in 7 days of jackfruit flour meal administration.

The study’s Lead Co-Author, James Joseph said “Medical Nutrition Therapy (MNT) is the first option for Diabetes Care as per ADA guidelines. This study has proven that it is possible to practice MNT in India for a long duration using Jackfruit365 flour”.

Scientific advances in diabetes management like these must pave the way for further exploration and study on traditional Indian diet. ■

NOT KIDDING!

Gluten intake during the first 5 years of life might be associated with the risk of celiac disease autoimmunity and celiac disease in at-risk children.



Gluten is a protein, comprising of gliadin and glutelin, of which gliadin peptides are resistant to complete digestion by our gastrointestinal enzymes. It is present as a food antigen in wheat, barley and rye. It causes an inflammatory response which might lead to celiac disease in genetically predisposed individuals. Celiac disease is an autoimmune enteropathy which is attributable to both environmental as well as genetic factors.

A study conducted by The Environmental Determinants of Diabetes in the Young (TEDDY) so as to assess the intake of gluten during the first 5 years

of life in genetically at-risk children and whether the amount of gluten consumption was associated with the development of celiac disease. For this, the gluten intake was estimated from 3-day food records collected at ages 6, 9 and 12 months and biannually thereafter until the age of 5 years.

It was found that the first 5 years of life is critical in terms of risk of celiac disease autoimmunity upon exposure to gluten. A higher intake of gluten during this period is associated with statistically significant increased risk of celiac disease autoimmunity and celiac disease among genetically children. If gluten intake is higher than the mean by 1 g/d at 2 years



of age, that corresponds to half slice of white bread, the absolute risk differences for the respective outcome is 6% and 7% higher by 3 years of age. This rise of increased risk appears clinically important.

It is also found that gluten intake is associated with an increased risk, is relevant for gluten feeding recommendations in at-risk children. This conclusion, however is yet to be confirmed. Such risks significantly increases if the child consumes >2g/d of gluten at age 2 years, which is about 1 slice

of white bread or 1 portion of cooked pasta. All these mean that an increased intake of gluten during the early years of life is an independent risk factor for developing celiac disease autoimmunity and celiac disease in genetically predisposed children. Other contributing factors for celiac disease may be differences in exposures to various triggering environmental factors, some of which are- gastrointestinal infection, rotavirus vaccination status etc. ■

<https://jamanetwork.com/journals/jama/fullarticle/2747670>

SAY YES TO TASTE, NO TO GLUTEN



Introducing Springg, India's first Indo-Irish venture in gluten free foods.
We produce gluten free baked goods of the highest standards without compromising on taste or texture.



GLUTEN FREE . LACTOSE FREE* . VEGAN* . SOY FREE
EGG FREE* . WHEAT FREE . ALLERGEN FREE*
* muffins, cakes & cookies contain dairy and egg

WHATSAPP: +917447674478
www.springfoods.com

WHAT'S COOKIN'?

RICE FLOUR VEGETABLE PARATHA



INGREDIENTS

White rice flour	1 1/2 cup
Water	1 cup
Salt	To taste
Oil/ Ghee	1 tsp
Onion	2 tbsp
Spinach, grated	2 tbsp
Carrots, grated	2 tbsp
Chillies, chopped	To taste
Cumin powder	1 tsp
Black pepper, powder.....	1/2 tsp
Red chilli powder	To taste

METHOD

- Boil water. Add salt and oil to it.
- Add rice flour and mix it roughly. Let it cool.
- Add the flours, flax seeds, xanthan gum, baking powder, and salt. Mix just until combined.
- Keep aside for 10 minutes.
- Add onions, grated carrots, grated spinach, and chopped chillies to the dough and mix well.
- Add salt, cumin, black pepper and red chili powder to the dough.
- Make parathas as you normally would using oil/ghee.
- Enjoy with your favourite pickle!

DID YOU KNOW?

Gluten can sneak up in things that you might not expect (such as: vitamins and mineral supplements, dressings, soy sauce, cosmetics, alcohol...)

GLUTEN-FREE TEA CAKE

INGREDIENTS

Gluten-free multi-purpose flour	1 1/4 cups
Baking powder	1 tsp
Butter	1 cup + 2tbsp
Sugar	1 cup
Eggs	5 nos
Raisins	5 tbsp
Cashew	5 tbsp
Black currant	5 tbsp
Orange peel	1/4 cup
Cinnamon, nutmeg, all spice	1 tsp
Rum and brandy	To soak dried fruits

METHOD

- Soak dry fruits in rum and brandy and keep in for 3-4 days in a warm place.
- Sieve flour with baking powder.
- Beat butter and sugar, add eggs one at a time.
- Mix dry fruits and flour mixture in the egg mixture while continuously stirring in one direction.
- Pour batter in small cake tin or an oven proof dish and bake it at 150°C for an hour. Insert a toothpick and if it comes out clean, your cake is baked!
- Enjoy with your favourite cup of tea or coffee.








3 MYTHS ABOUT GLUTEN BUSTED

- It's okay to consume gluten every now and then: **FALSE.**
- Celiac disease patients need to be 100% gluten-free else their diet can prove harmful.
- Spelt grain is gluten-free: **FALSE.**
Spelt grain is a form of wheat and should be avoided if you are allergic to gluten.
- You can absorb gluten through skin contact. **FALSE.**
- There is no physical evidence that supports this. To have an effect on your gut gluten needs to be consumed.



FOOD FOR THOUGHT

How To Eat The Rainbow - Literally!

		JACKFRUIT: Instant mood booster. Boosts skin health, hair health, bone and dental health. Promotes collagen production.
		CARROT: Protects eyes (carotenoid). Helps our immune system and fight against cancer.
		POMEGRANATE: Fight heart diseases and cancer. Reduce inflammation. Up immune system. Regulate hormones. Protect skin, hair, nails.
		AMLA: Protects our eyes and our bones. Protects against cancer. Supports the immune system. Regulates our digestion.
		EGGPLANT: Help our heart and our brain. Help fight cancer. Protect against diabetes.

Word Search

Can you find these words in the puzzle?

AUTOIMMUNITY

GLUTEN

GUT

HEALTH

IMMUNITY

MICROFLORA

PREBIOTIC

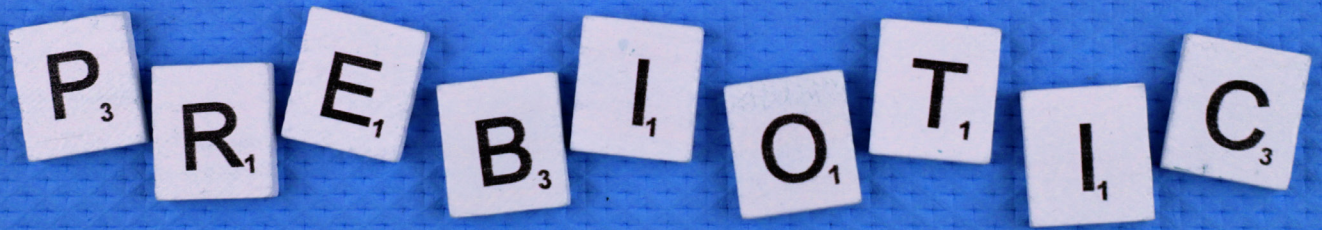
WHEAT

C	I	L	C	L	J	R	B	K	C	Y	I	Z	Z	M
L	T	S	Q	F	T	G	F	I	L	D	D	G	B	L
L	H	Y	V	U	O	G	V	L	W	V	E	Y	Y	K
I	X	L	X	U	U	E	P	I	Q	N	Y	T	D	Q
A	P	I	H	T	H	M	V	H	P	C	T	D	M	D
H	T	L	Y	F	D	C	R	B	R	U	I	V	N	E
U	T	G	L	U	T	E	N	E	E	H	N	X	M	X
M	U	L	I	R	O	Z	X	M	B	G	U	C	P	X
N	A	B	A	M	K	H	G	T	I	O	M	Q	B	U
T	W	W	B	E	M	C	H	T	O	O	M	D	E	H
L	U	U	Q	S	H	U	A	T	T	E	I	R	U	X
A	T	B	C	I	G	E	N	N	I	T	O	N	T	K
M	A	A	D	T	H	W	B	I	C	Q	T	K	X	L
C	H	T	U	W	O	L	O	V	T	G	U	S	K	R
A	R	O	L	F	O	R	C	I	M	Y	A	E	V	P

Source: thewordsearch.com/puzzle2512652

Feed That Moral Dietary Fibre

Prebiotics are a type of dietary fibre that feed the gut-friendly bacteria in our gut, or are food for probiotic bacteria. These include inulin, Fructo-oligosaccharides, Galacto- oligosaccharides, inulin that used as substrates for growth of probiotic bacteria. The fermentation results in the production of short-chain fatty acids such as acetate, butyrate and propionate, which are important source of energy for the intestinal cells and also help in reduction of inflammation and preserve gut integrity.



A healthy gut is a key to well-being. Over the past few years, we have all begun to understand the role of probiotics in keeping the gut healthy. And we all supplement our diet with probiotic enriched foods and supplements. These are the foods that feed probiotics. Studies have shown us that prebiotics improve regularity of bowel, promote the wellbeing of colon, improve the absorption of nutrients, and regulate our appetite. They also improve the immune function. Researches also suggest that prebiotics help us recover from stress by maintaining the gut flora, which is otherwise altered because of stress. Good sources of dietary fibre are chicory root, dandelion greens, Jerusalem artichoke, garlic, onions, leeks, asparagus, bananas, barley, oats, apples, konjac root, cocoa, burdock root, flaxseeds, yacon root, jicama root, wheat bran, seaweed etc.

Prebiotics & Probiotics in Ayurveda

Ayurveda has evidence of practices of all those things which we are re-discovering in today's world. Prebiotics and probiotics have been known to humans for a while. Such products have become popular because of the presence of good bacteria in them. The concept of beneficial bacteria has been reintroduced with the emergence of probiotic and prebiotics in the country.

One of the oldest methods of food preservation is fermentation. In fermentation, the raw materials are converted by



microorganisms to simpler substances by lactic acid bacteria which can then be easily absorbed by the human body. These foods, especially fermented products of rice like sidhu, sura, not just enrich our bodies nutritionally, but also grant us health benefits.

Ayurveda has certain peculiar preparations which were believed to have probiotics and prebiotics. Although, not true probiotics and prebiotics, they have excellent nutritional properties. These preparations are fermentation preparations (asava- arishtas) and diet preparations (pathya kalpas), which are fermented products. ■

IT'S ALL IN THE GUT

Case Study: How this wealth manager shook off obstinate post-vaccination symptoms by opting for a gluten-free and dairy-free diet.



IA 44-year-old obese gentleman with a BMI 31.96 kg/m² had no history of diabetes or hypertension. He did not have any known medical conditions in the past except a fractured arm for which a rod had been inserted seven years ago. He had suffered from mild covid and recovered well.

Post his vaccination he developed anxiety, high blood pressure (160/110), incoherence, foggy brain and stammering. He also gained some weight about 7 kgs in two months. All these symptoms developed over a few weeks of his vaccination. He was unable to work or go through his normal routine. As a wealth manager he needed to talk and have long meetings with sharp focus. Seeing his sudden decline in health, he was put on medication for high blood pressure and some others. However, his anxiety, stammering and brain fog did not improve.

He enrolled himself in a health spa after which he began to improve gradually. He spent about two weeks there. Subsequently he came to nutritionist

Ms. Ishi Khosla where he was found to have low vitamin D, vitamin B12, abnormal lipids, elevated glycosylated haemoglobin (HbA1C) and mild derangement in liver enzymes.

He was put on a regimen which included elimination of gluten and dairy, along with gut healing supplements and nutritional supplements. Within the first follow up after 10 days he reported dramatic improvement. His symptoms were in complete remission by the end of a month. His blood pressure had normalised and all his medications had been withdrawn. He has gone back to his full-time job of a wealth manager.

The case study demonstrates the profound shift in gut flora post vaccination. While most get away, those with underlying health conditions there is exacerbation of symptoms and immune system disturbances. The remission with dietary interventions highlights the need to follow a healthy diet and lifestyle post-vaccination for 45 days as suggested by scientists and research studies. ■

.....
Newsletter curation: Celiac Society of India
Publication layout design: The Partum Collective
Web optimisation: Himalayan IT Solutions Pvt. Ltd.
Content research: Anindita Das
Logo design: Nabadeep Kakati

The Celiac Society of India presents its new website, found at celiacsocietyofindia.com.
 More information about ISWD 2019 can be found at iswd2019.com.
[Covid 19 dos and donts after vaccination](#)