

THE CELIAC SOCIETY OF INDIA PRESENTS
GRAIN MATTERS



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supported by



IT'S MILLET TIME!

The Grain That's
Empowering Your Gut

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A GUT DECISION

How Your Social Choices
Depend On What You Eat

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FESTIVE FEAST!

Enjoy your favourite
sweet's taste, guilt-free!

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EDITOR'S NOTE



profound role of gut health in shaping our interactions and decision-making processes. The research also highlights how diet-related changes can modulate key neurotransmitters like dopamine, which in turn affect social cognition and motivation.

What's particularly compelling is that these findings have broader implications, not just for individuals with clinical conditions like depression and anxiety, but also for healthy individuals seeking to optimize their mental and social well-being. By maintaining a balanced diet and nurturing our gut microbiome, we may have a powerful tool for improving both emotional regulation and social interactions.

Dear Readers,

This issue of Grain Matters delves into a fascinating emerging area of research: the impact of the gut microbiome on social decision-making. As we continue to explore the intricate connections between diet, brain health, and behaviour, new studies are shedding light on how our gut's ecosystem may shape how we interact with others, make decisions, and even regulate emotions.

One groundbreaking study explored how changes in diet—specifically those that alter the composition of the gut microbiome—can directly influence our social behaviours. From a tendency to prioritize fairness to the willingness to engage in altruistic punishment, the results underscore the

As we continue to examine the interplay between food, gut health, and brain function, we hope this research encourages more discussions around the importance of a balanced diet—not only for physical health but also for mental and social well-being.

Don't miss the recipe section , case study & your favourite crossword!

Happy reading, and stay curious!
Warm regards,

Ishi

Ishi Khosla
President, Celiac Society of India

The Inflammation Fix

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Multi Talented & Social Worker



INFLAMMATION FIX

A relationship between the gut, millets and microbiomes

The Celiac Society of India, in partnership with Mera Millet Magic, First Medical Diagnostics Pvt. Ltd., Dr. Dang's Lab, and ICCIDD, hosted the seminar "Gut, Microbiome and Millets: The Inflammation Fix" on 6 July 2024 at India International Centre, New Delhi. Supported by Illness to Wellness, the event's focus was on gut health as a key to preventing and managing common health issues like obesity, diabetes, heart disease, and mental health challenges.

The gut, often known as the "second brain," plays a vital role in our overall health and wellbeing. Two-third of our immune system is in the gut, making it a key player in our body's defence against illness. The seminar's main objectives were to raise awareness about the deep connection between what we eat, the health of our gut, and the diseases we may face. A healthy microbiome is essential for good health, but this balance can be easily disrupted by our diet, especially by commonly consumed grains. The seminar highlighted

on consumption of ancient grains, like millets, which are known for their anti-inflammatory and gut-friendly properties, as a better alternative.

The gut, often called the "second brain," is crucial for overall health, housing two-thirds of our immune system. The seminar highlighted the link between diet, gut health, and disease, stressing the importance of maintaining a healthy microbiome. It promoted ancient grains like millets, known for their anti-inflammatory and gut-friendly benefits, as a superior dietary choice.

The event was designed for a diverse audience, including medical professionals, nutritionists, students, patients, caregivers, and the public. The seminar was structured with keynote speeches, expert presentations on the microbiome, lifestyle disorders, food sensitivities, and a condition known as leaky gut syndrome. There were also panel discussions focusing on the role of millets in gut health and addressing common myths and misconceptions. ■



In frame, from Left Dr Pooja Kapur, Dr Chandrakant Pandav, Mr Balwant, Ms Ishi khosla, Dr Ashima Shukla, Dr Ashutosh Shukla, Ms Anju Khosla and Ms Hema Bhatnager



Lecture sessions by Dr Ashutosh Shukla and Ms Ishi Khosla



Gut-Feeling event attendees



The panel speakers of the event

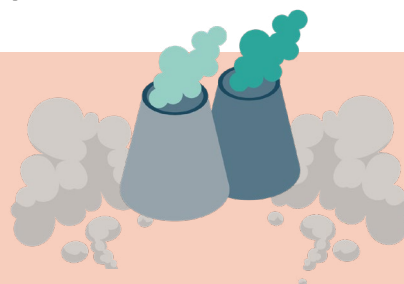
A SECOND BRAIN

The Gut Symposium

The Celiac Society of India, Prana Integrative Medicine Institute, and Illness to Wellness hosted a seminar on 12 September 2024, at Club Vita, Gurgaon, highlighting the link between gut health and mental well-being. Attended by healthcare professionals, mental health advocates, and wellness enthusiasts, the event explored how gut health affects anxiety, depression, brain fog, and overall happiness.

The seminar highlighted the gut as a "second brain," housing 70% of the immune system. Experts explained how gut imbalances trigger inflammation, worsening anxiety and depression, and showed how improving gut health enhances mental clarity, reduces stress, and boosts mood. Attendees discovered the significant impact of dietary choices on gut health and emotional balance. Case studies demonstrated how dietary adjustments significantly improved mental health and reduced dependency on medications for mood disorders.

The event featured keynotes from gastroenterology, psychology, and nutrition experts, followed by panel discussions and a lively Q&A. Practical advice offered valuable insights, especially for those managing mental health challenges, deepening the understanding of holistic wellness. ■



Baby Steps to Combat Pollution

1. Eat a small piece of jaggery after being outdoors to coat your throat. Avoid chewing for best results.
2. Apply mustard oil or ghee inside nostrils once or twice a day at least.
3. Rinse eyes with rose water twice a day.
4. Apply castor oil under eyes before sleeping
5. Take a probiotic or prebiotic regularly.
6. Chawanprash half spoon daily.
7. Vegetables rich in bright colours & greens are great to detoxify.
8. High-quality omega-3, spirulina, seaweeds, and supervised Vitamin D & C supplements are beneficial.
9. Use ionisers in your cars & air purifiers indoors.
10. Opt for home-cooked meals with healthy fats like ghee and coconut oil. Avoid processed foods, excess sugar, and fried items.

LIBERATING GUT DECISIONS

Is your gut affecting your decision-making? Here's why



The gut microbiome, made up of microorganisms living in our digestive system, plays a significant role in influencing both our health and behaviour. In this study, researchers found that changing a person's diet directly altered their gut microbiome, and these changes affected how they made decisions in social situations. This research provides strong evidence that the composition of the gut microbiome can influence social decision-making. It also highlights the role of a chemical called tyrosine, a precursor to dopamine. These findings shed light on how the gut-brain connection influences social behaviour and stress the importance of a balanced diet for maintaining healthy social interactions.

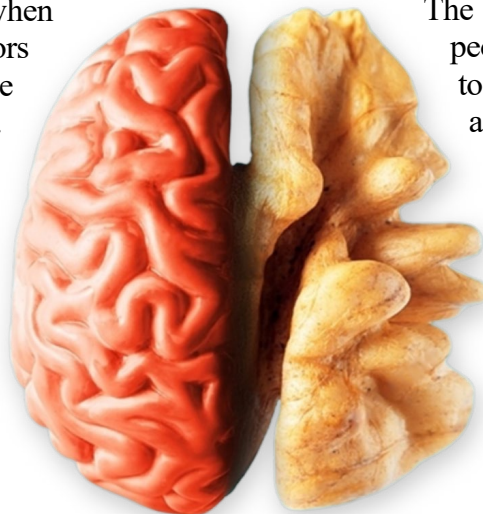
Recent studies in biology and neuroscience are exploring how the gut microbiome affects human behaviour, cognitive abilities, and brain function. Social interactions can influence the composition of the gut microbiome, but the gut microbiome can also modulate or shape social behaviour. A large body of research links the variety and balance of the gut microbiome to emotional and social behaviours in animals and humans, as well as in people with clinical conditions like anxiety and depression.

The gut communicates with the brain through several pathways, including the vagus nerve, biochemical signals sent through the immune system metabolites produced by gut bacteria, hormones and neurotransmitters. The role the gut microbiome plays in regulating neurotransmitters like dopamine and serotonin is crucial mood regulation and social behaviour. Their precursors, such as tyrosine and tryptophan, are types of large neutral amino acids (LNAA) impact how we think and behave socially. Tyrosine helps produce dopamine, while tryptophan is necessary for serotonin production.

The researchers used a standard behavioural economics game to measure altruistic punishment, which refers to situations where a person is willing to punish unfair behaviour even if it comes at a personal cost. They found that by subtly changing the participants' diet over seven weeks, they were able to alter the composition of the gut microbiome, which in turn led to increased altruistic punishment. The study also found that the effects were stronger for participants who had an unhealthy gut balance at the start of the experiment, which was measured by the F/B ratio, a common marker of gut health that compares the ratio of two major types of gut bacteria.

The study also explored how changes in the availability of dopamine precursors like tyrosine, which are influenced by diet, could lead to changes in behaviour. Diets that lower the availability of tyrosine were associated with increased altruistic punishment, suggesting that when there are fewer dopamine precursors in the system, people may be more likely to punish unfair behaviour. However, the study found that changes in the gut microbiome can affect the availability of these precursors, even without changes in diet. This means that the gut microbiome not only acts as a middleman between diet and behaviour but can also directly impact the brain's chemical balance.

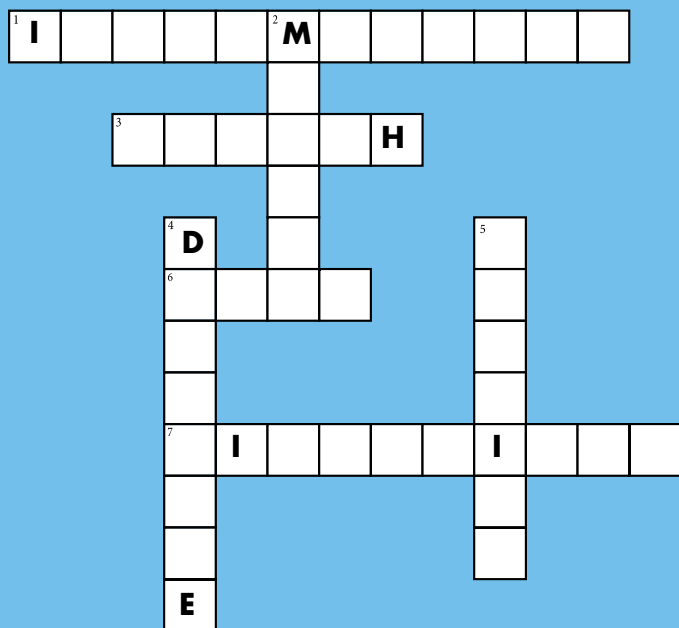
Additionally, the effects of diet on the gut microbiome differ between males and females. This is because the gut microbiome can interact with sex chromosomes and hormones, leading to different metabolic processes in men and women.



This difference in how the microbiome influences metabolism could explain why diet-related changes to the microbiome might affect males and females differently when it comes to behaviour.

The gut microbiome is also altered in people with clinical conditions linked to social and emotional processes, such as depression, anxiety, and autism. Here changes in the microbiome can lead to altered social behaviour. This study showed that altering the gut microbiome of healthy males through diet could influence social decision-making. This suggests that the gut microbiome might have a broader role in shaping social thinking and behaviour, not only in those with clinical conditions but also in healthy individuals. This discovery provides new insights into the gut-microbiome, gut-brain axis and opens the door to further research on how dietary interventions could improve social and emotional health. ■

What are your wheat views?



DOWN

2. Ancient grain often used as a gluten-free substitute, rich in nutrients and now gaining popularity.

4. Feel-good" chemical in the brain that helps control pleasure and reward.

5. A practice found in many cultures, where you refrain from food for a period, believed to promote health and reduce the risk of diseases like diabetes and heart condition.

ACROSS

1. The body's immune response that, if prolonged, can contribute to chronic diseases like arthritis or heart disease.

3. _____ is wealth.

6. A cross-reactive grain with wheat often sold under gluten-free alternatives.

7. Collection of tiny organisms (bacteria, fungi, etc.) living in your gut.

WHAT'S COOKIN'?

GLUTEN-FREE GULAB JAMUN

INGREDIENTS

For gulab jamun balls

Milk powder.....	1 cup
Gluten-free all-purpose flour.....	2 tsp
Ghee.....	2 tsp
Baking soda.....	1/4 tsp
Cardamom powder.....	A Pinch
Oil/ghee.....	For frying

For sugar syrup

Sugar.....	5-6 pc
Cardamom pods, crushed.....	4-5
Rose water (optional).....	1 inch
Saffron (optional).....	A few strands

GLUTEN-FREE MATHRI



Image from: sinfullyspicy.com



Image from: sincerelyasma.com

METHOD

- For syrup: Boil sugar with 2 cups water and crushed cardamom for 10 minutes. Add rose water and saffron and set aside.
- For dough: Mix milk powder, flour, ghee, baking soda, and cardamom powder. Add milk gradually to form a soft dough. Let it rest for 5-10 minutes.
- Roll dough into small balls. Heat oil and fry until golden brown. Drain on paper towels.
- Soak the warm balls in sugar syrup for 1-2 hours before serving.

INGREDIENTS

Gluten-free flour.....	1 cup
Ghee/oil.....	¼ cup
Carom seeds.....	1/4 tsp
Cumin seeds.....	1/4 tsp
Black pepper powder.....	1/4 tsp
Salt.....	To taste
Oil.....	For frying

METHOD

- Mix flour with the spices and salt.
- Add ghee and knead well with water to form a stiff dough. Let it rest for 10-15 minutes.
- Divide the dough into balls, and flatten into discs (2 inches wide), and prick with a fork.
- Heat oil and fry discs in batches until golden and crispy. Drain on paper towels.

Diet Change Led to a Life Change

Journey of Healing Through Diet to Wellness

Ranjan Chaudhary (name changed), a 39-year-old man, came with concerns about weight loss, fitness, and general health. He had a family history of thyroid issues and was dealing with elevated cholesterol. His main complaints included persistent body aches, brain fog, patchy hair loss in his beard (alopecia), and water retention. He was not on any current medication but had very low levels of vitamin D.

To address his issues, Ranjan was placed on a strict gluten-free and dairy-free diet, avoiding foods like corn, soy, and oats, which can act as cross-reactive grains.

In just 7 days, during his first follow-up, Ranjan reported significant improvements. His energy levels, mood, and mental clarity were much better. He felt stronger, and his body aches, brain fog, and water retention had dramatically decreased. He also lost some weight and noticed an overall boost in positivity and well-being. ■



WRAP & ROLL

It's the The Gut Feeling (which feels right)



Gluten-free



Gut-friendly



Rich in fibre



Multiseeds Wrap

www.springfoods.com

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The Celiac Society of India presents its new website, found at celiacsocietyofindia.com.
 More information about ISWD 2019 can be found at iswd2019.com.