

Vegan probiotic oat based yogurt.

We have billions of soldiers in our gut helping us stay healthy. They need to be replaced regularly through food. If you are vegan or cannot digest milk or simply love oats, there is good news for you.

Did you know there are billions of bacteria in our gut, and they are helping us digest our food better? These unsung soldiers, called probiotics, need to be constantly replaced especially because of our stressful lifestyle. One way to help them reach our gut is by consuming certain food products called probiotic foods. In the market all most all probiotic foods are dairy based. But what if you are vegan or cannot digest milk or just don't like the taste of dairy products? How will you guide these probiotics to their rightful place to keep you healthy? In order to help you, in this study one such probiotic called "*Lactobacillus plantarum 299v*" was added to a vegan oat based yogurt, which is called an oatgurt. Oatly AB, a Swedish food company that strictly stays away from anything dairy, manufactures these oatgurts and packages them in plastic cups. The vanilla/blueberry oatgurt was specifically studied. When we add probiotics in any food product, it is important to check if they are happy in it and also if the oxygen inside the packaging they are protected in affects them in any way. The oatgurt with the probiotics were stored in glass and plastic cups for eight weeks and studied to see which one they prefer as glass does not allow any oxygen, while plastic lets a little oxygen inside during storage.

We found that the probiotic was happy in the oatgurt and a little oxygen that the plastic cups let in did not affect it. This is good for Oatly, as using plastic would be less expensive compared to glass and there is also low risk of breaking the packaging unit. During the study the colour of the oatgurt was also checked, and it was observed that the oatgurt changed from 'bright and blue' to 'dull and grey' if not kept at the right cold chain temperature. This means that Oatly can now make a vegan probiotic food product for you by adding probiotic '*Lactobacillus plantarum 299v*' into oatgurt, packaging it in plastic cups and storing it in the refrigerator.

"Let food be thy medicine and medicine be thy food" – said Hippocratic more than 2500 years ago. It is important that everyone, regardless of what their food preferences are, have an opportunity to get his or her medicine through food. This study is one such effort to develop a non-dairy probiotic yogurt that can be a functional food option for everyone.

Divya Mohan