

- **Importance of Milk Proteins for a Healthy Lifestyle by Dr Shashi Pankaj, Senior Manager – F&D, Zydus Wellness R&D**

Dr Shashi in his presentation explained that milk contains number of different proteins. The most abundant ones are four types of caseins and two whey proteins. These caseins, namely α s1, α s2, β , and K-caseins, make up around 80% of the total protein content of bovine milk. They come in various genetic variations, resulting in different amino acid replacements that may affect their function. When combined, these four caseins form casein micelles, which are complex protein structures. These casein fractions are also known as phosphoproteins because they contain phosphorous groups in their structure. They can be separated from raw milk by lowering the temperature to 20°C and adjusting the pH to 4.6. Further Dr Shashi spoke on Sources and Benefits of Bioactive Peptides in Milk & mentioned that Bioactive peptides refer to specific protein fragments that have functional and physiological benefits. They are produced during the gastrointestinal digestion, microbial fermentation, and enzymatic hydrolysis of various food products, including milk. He provided an overview of the different categories of dairy products and discussed the various items included in each category.