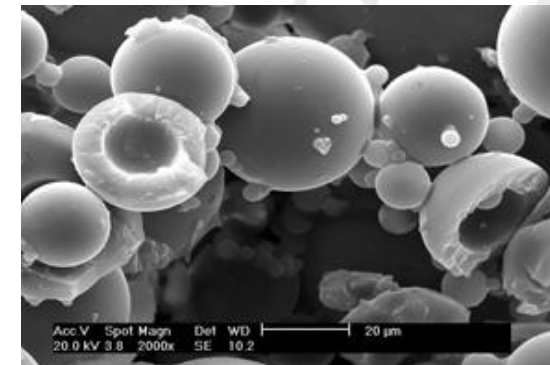


Challenges and opportunities for encapsulation



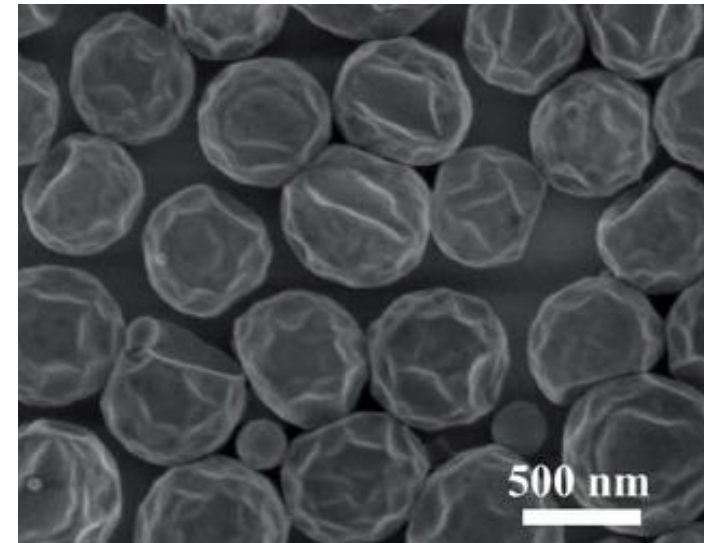
Dr. Brijesh Tiwari

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New trends in encapsulation

- Smaller molecules
- Higher production rates/ Scale-up capacity
- Reduced production costs
- Reduced use of solvents/chemicals
- Narrow size distribution particles



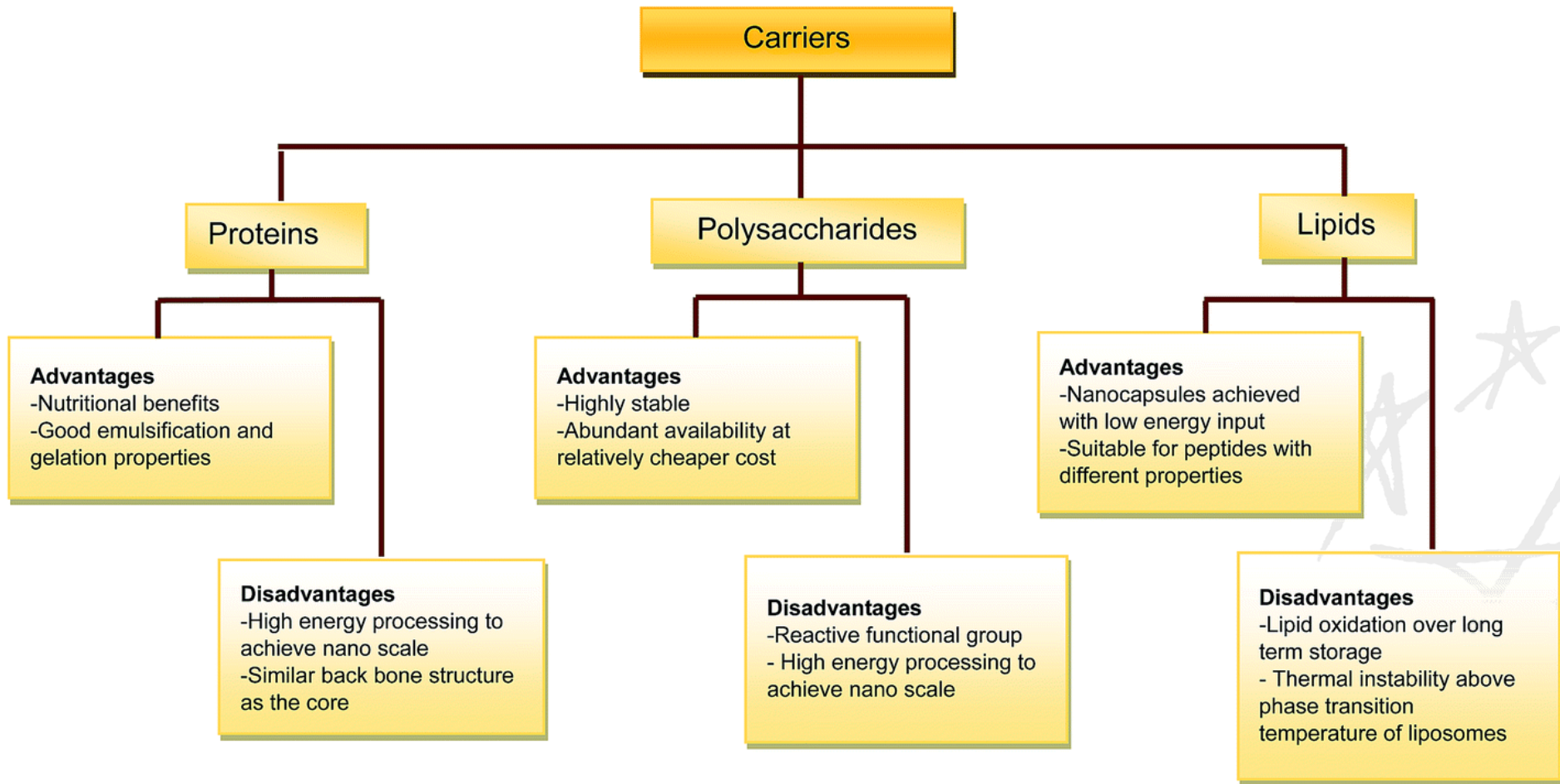
Nanoencapsulation

Fluid bed coating
(batch X continuous)

Coextrusion aided
by EHD or vibration

Supercritical fluids
(H₂O, propane, N₂,
CO₂)





Opportunities

- Use of food processing by-products or processing streams
- Improve nutritional quality of food products
- New technologies in food production and processing
- New technologies to increase efficiency, reduce environmental impact of production
- Nutrition and dietary needs
- Consumer demand for food products that are tasty, healthy and convenient.

Encapsulation is an important way to meet these demands by delivering food ingredients



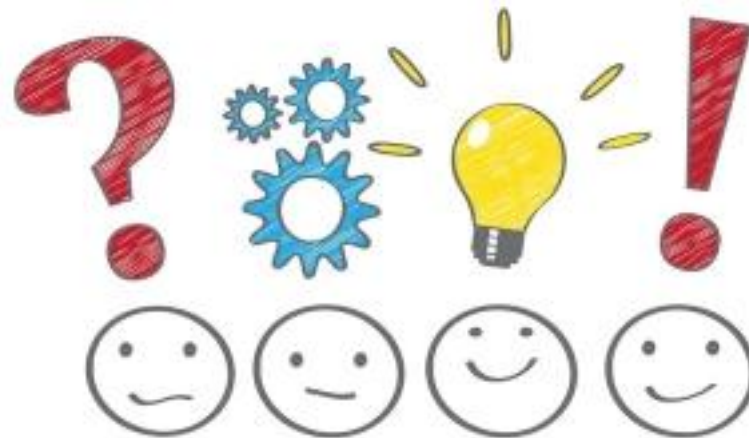
Nutritional and health claims

- Within the European Union (EU), a regulation on nutrition and health claims came into force in 2007.
- Under the regulation, health claims are subject to pre-approval, involving scientific assessment by the European Food Safety Authority (EFSA).
- However, although EFSA assesses the scientific dossiers supporting potential health claims, the final decision to accept or reject a claim lies with the European Commission (EC).

<http://ec.europa.eu/nuhclaims>

Thank you for your attention!

ANY QUESTIONS??



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