# **Yeast glucan particles – bioactive drug vehicles**

## How can baker‘s yeast combat against inflammatory diseases

Yeast glucan particles (GPs) are promising agents for the delivery of biologically active compounds as drugs. GPs possess their own biological activities and can act synergistically with their cargo. β-Glucans, the main component of yeast cell walls, can modulate both innate and adaptive immune responses via their recognition by innate immune cells and activated immune cells then promote immune responses.

Glucan particles protect payloads from the harsh conditions in the gastrointestinal tract and can interact with the intestinal immune system, they might increase the bioavailability of their cargo. Immune cells associated with Peyer’s patches in small intestine can then use the lymphatic system to distribute the cargo of the GPs to various organs of the reticulo-endothelial system, such as the liver, the lung, the spleen, and the kidney, or into inflamed sites and tumors. These features make GPs suitable candidates for the oral delivery of diagnostic or therapeutic compounds.