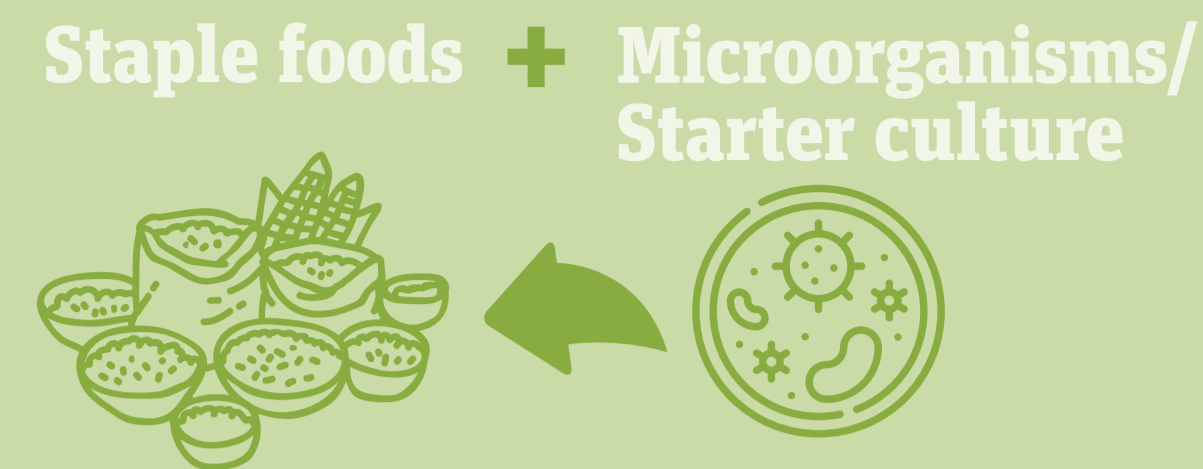


The Multifaceted Value of Fermentation

Fermentation, a time-honored method of food processing worldwide, harnesses the power of microorganisms to transform raw ingredients into nutritious, flavorful foods. It holds significant potential to support sustainable and equitable food systems, particularly across low- and middle-income countries.



Food safety and preservation



- Ensures food safety by creating conditions that suppress harmful pathogens
- Extends shelf-life by producing natural preservatives that prevent spoilage and reduce food loss and waste

Organoleptic properties

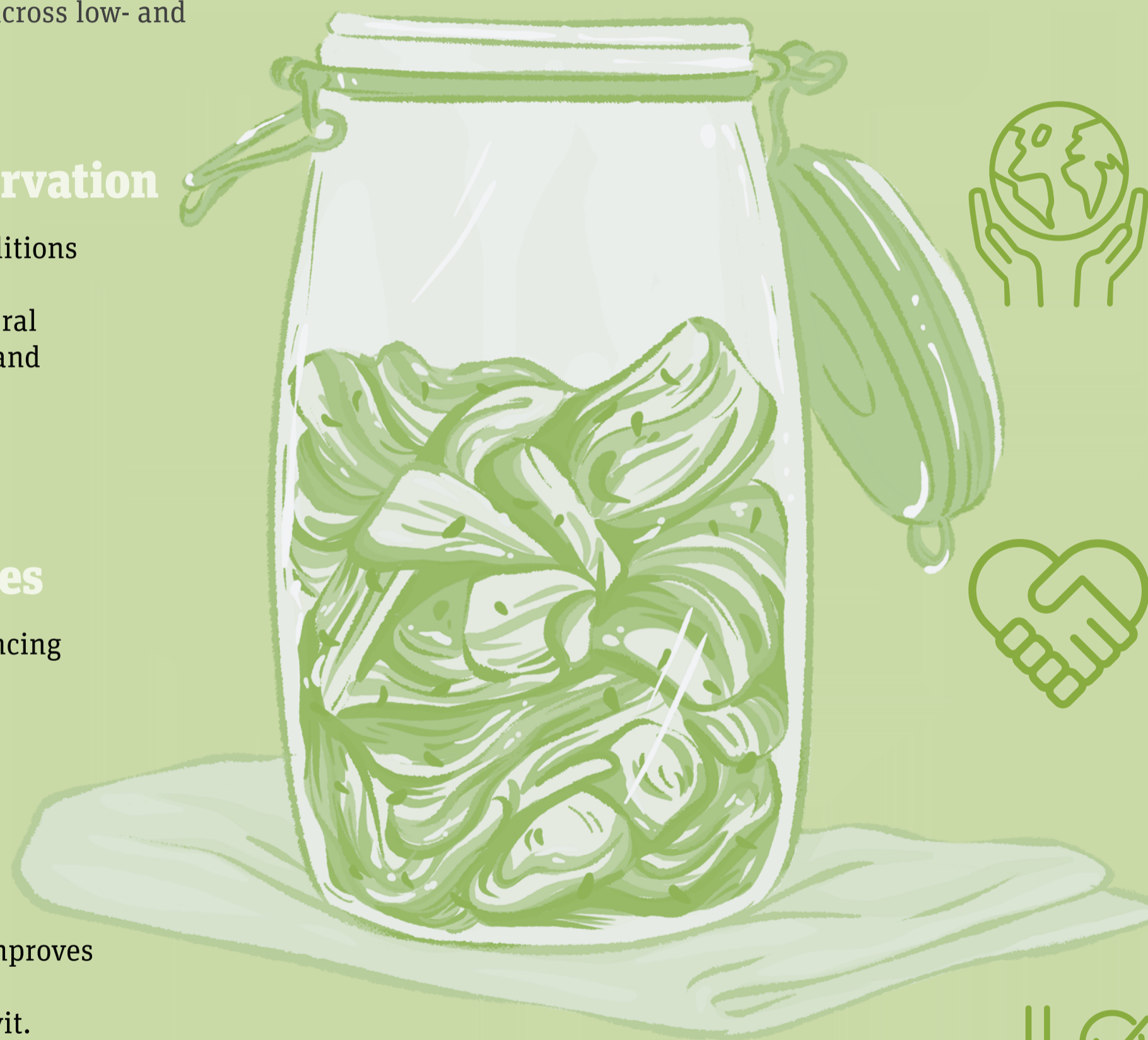


- Enhances sensory properties, enhancing flavors, aromas and textures

Nutritional value



- Increased protein digestibility: enhances breakdown of proteins
- Increased mineral bioavailability: improves calcium, zinc and iron absorption
- Vitamin bio-enrichment: increases vit. B2, B9 and B12 content
- Reduced anti-nutritional factors, allergens and toxins



Environmental benefits

- Supports sustainable food systems by requiring less energy input compared to other preservation methods, reducing the carbon footprint
- Reduce need for long-distance transportation by promoting consumption of locally produced foods

Social impact

- Honors traditional practices: well-accepted and embedded in culture
- Valorization of local raw ingredients: promotes local flavors and traditions
- Empowerment of local, smallholder producers and workforce (especially women and youth)
- Income generation: creates economic opportunities

Potential health benefits

- Source of beneficial bacteria: supports gut health
- May have an impact on immunity and overall health