
PROBIOACT Technology

A newly branded technology that summarizes years of scientific research on probiotic effectiveness.

It is our mission to develop the most effective probiotic products. Therefore, we continuously conduct research on interactions between microbiota, probiotics, health and disease.

For each probiotic product we select specific bacteria depending on the indication. Besides selection of the right bacterial strains, the effectiveness of a probiotic highly depends on the condition of the bacteria. That is why a large part of our research focuses on ingredients that improve the wellbeing of our bacteria.

To make this knowledge recognizable and understandable for our business partners we have decided to brand this knowledge under the name **PROBIOACT Technology**, short for **PROBIO**tic **ACT**ivity.



PROBIOACT provides bacteria with specific protection and nutrition. Every Winlove formulation contains PROBIOACT, but the composition is different for each formulation. All ingredients in Winlove's probiotic formulations have a special function and Winlove continually searches for improvements in terms of stability, survival through the GI tract and metabolic activity. By these means Winlove continues to improve the quality and efficacy of the probiotic formulations, to optimize the result for the consumer.

⊕ Longer shelf life (stability)

In traditional probiotic products, a large number of viable cells is killed during exposure to environmental conditions. The PROBIOACT Technology protects the bacteria in the product against these conditions and allows storage at room temperature. After 1-2 years of storage we can still guarantee the cell count in the product.

⊕ Improved (gastro-intestinal) survival

When rehydrating a probiotic product before ingestion, unprotected bacteria experience osmotic shock. Ingredients that are part of PROBIOACT Technology create an isotonic environment, which reduces the shock the bacteria experience. This keeps the bacteria alive.

After rehydration, the probiotic bacteria will be consumed and have to pass the gastro-intestinal (GI) tract. In traditional probiotic products, a large number of viable cells is thereby killed as a result of the low pH in the stomach and the digestive enzymes and fluids in the GI-tract. The PROBIOACT Technology protects the bacteria against the acidic conditions in the stomach and keeps them alive and kicking.

⊕ Higher metabolic activity

Finally, after survival of the GI-tract, the probiotic bacteria are in the (small) intestine and have to be effective at the right time and at the right place. Specifically selected ingredients that are part of PROBIOACT Technology bring the bacteria into an active state. In this active state the bacteria produce (lactic) acid, short-chain fatty acids, and other metabolites. PROBIOACT provides the bacteria with their nutritional needs. They are able to colonize and multiply, resulting in an even more effective probiotic product.

PROBIOACT Technology includes different ingredients that give food and protection to the probiotic bacteria. Every Winlove formulation contains a different mixture of bacteria and thus different PROBIOACT ingredients. All these ingredients have a special function.

The PROBIOACT Technology consists of product-specific, protective and nutritional ingredients, specifically selected and tested to increase:

- ⊕ The shelf life of the product
- ⊕ Gastro-intestinal survival of the bacteria
- ⊕ Activity of the bacteria in the intestine

PROBIOACT Technology boosts the effect of probiotics to optimize the result for the consumer

PROBIOACT logo usage

The PROBIOACT logo can be used by Winlove's business partners as co-branding on their package. At the moment, the registration of the brand logo is still pending. More information about PROBIOACT can be found on the website www.winlove.com. Diverse digital logo formats can be obtained, for this please ask your contact person at Winlove.



Key characteristics of Winlove's probiotic formulations:

Bacteria	Multi-species	Combination of different strains with different properties resulting in high efficacy
	Evidence based	Strains are extensively screened for their <i>in vivo</i> and <i>ex vivo</i> characteristics
	Application specific	Strains with characteristics effective for the specific application
	Stability	Stable at room temperature with a shelf life of 1-2 years
	Survival of the GI-tract	Excellent survival of bacteria through the GI-tract
	Metabolically active	Bacteria arrive in the intestine in good condition resulting in effective products