**Propionibacterium freudenreichii W200**

First probiotic strain with **8 EFSA Approved Health Claims**

**New Innovation**

Winclove has upgraded the fermentation process of *P. freudenreichii* W200 in such a way that the bacterium now contains sufficient amounts of natural vitamin B12 to make an EFSA approved vitamin B12 health claim. It is now possible to make an EFSA health claim on your probiotics without adding other functional ingredients.

**8 EFSA Claims**

The European Food Safety Authority (EFSA) has validated 8 health claims for vitamin B12. A health claim may be used if a daily dose of 0.375mcg vitamin B12 is added to the formulation. The upgraded *P. freudenreichii* W200 can provide this amount of vitamin B12 in a daily dose.
With the upgraded *P. freudenreichii* W200 the following 8 EFSA health claims can be made:

- Vitamin B12 contributes to the reduction of tiredness and fatigue
- Vitamin B12 contributes to the normal function of the immune system
- Vitamin B12 contributes to normal functioning of the nervous system
- Vitamin B12 contributes to normal psychological function
- Vitamin B12 contributes to normal energy-yielding metabolism
- Vitamin B12 contributes to normal red blood cell formation
- Vitamin B12 contributes to normal homocysteine metabolism
- Vitamin B12 has a role in the process of cell division

**Bioavailability**

*P. freudenreichii* W200 produces and stores vitamin B12 in its cells during the fermentation process. After ingestion, vitamin B12 is slowly released during its journey through the GI tract. In a GI-survival model we have measured a release of around 10-20% in the stomach, this number is increased to 35-65% in the small intestine, with a maximum release of 50-85%. The slow release of vitamin B12 by *P. freudenreichii* W200 is expected to be an advantage because most of the vitamin is still protected from stomach acid and the largest amount will not be released until the bacteria reach the duodenum and beyond. We know that bioavailability of vitamin B12 is of great importance for its efficacy. Currently, we are investigating the possibilities to measure the bioavailability in vivo.

**People at risk for vitamin B12 deficiency**

Vitamin B12, or cobalamin, is a water-soluble vitamin needed for proper neurological functioning, red blood cell formation and DNA synthesis. The human body does not synthesise vitamin B12 and intake is required from animal-based foods or supplements. People at risk for a vitamin B12 deficiency are: