



The new intelligent ingredient for gut health

Benegut® - the innovation for digestively stressed consumers



- ✿ Benegut is an innovative, natural, gut health ingredient, which combines prokinetic as well as antispasmodic and anti-inflammatory efficacy leading to an immediate, perceptible balancing effect on bowel function
- ✿ *In vitro* and human studies demonstrated that Benegut is able to balance bowel movement by interacting with the neurological system and therefore can counteract the effects of psychosocial factors, such as e.g. stress causing altered gut physiology leading to gastrointestinal discomfort
- ✿ Benegut is IP protected and approved to be used in food supplements in Europe and the U.S.

Benegut® - supports concepts for:

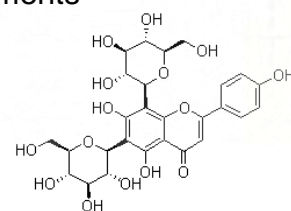
- ✿ Gut health concepts with focus on bloating and abdominal discomfort; IBS
- ✿ Concepts to maintain and improve digestion during aging
- ✿ Wellbeing concepts to support a flat belly – “skinny jeans drinks”



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Benegut® product information

- Benegut is obtained by water extraction out of *Perilla frutescens* (L.) leaves, an annual edible herbaceous plant native to Asia
- Perilla frutescens* is a member of the family *Lamiaceae*
- Its common names are:
Shiso (Japan), 紫蘇 Zi Su Ye (China)
Perilla, Japanese Melisse or Japanese Basil (USA, Europe)
- Benegut is a water soluble fine beige powder
- Benegut's production facility and manufacturing process comply with the highest international standards of safety, hygiene and quality control: ISO-9001:2008, ISO-22000:2005 and is GMP certified for dietary supplements
- Benegut is a high quality, sustainable natural ingredient
- Benegut complies with highest quality and traceability standards, completed by phytochemical characterization and stability data
- Benegut is standardized on a special flavonoid fraction, its key active ingredient Vicenin 2 and on rosmarinic acid, determined by HPLC



Specifications:

Appearance:	Fine beige powder with a characteristic odor
Solubility:	Freely soluble in 100 g/L in water
Loss on drying:	< 5.0 %
Particle size:	> 80 %: < 180 µm
Bulk density:	0.25-0.33 g/ml
Tapped density:	0.34-0.48 g/ml
pH:	4.6-5.6 10 % water solution
Foreign matter:	not detected
Total Polyphenols	> 0.57 %
Rosmarinic acid:	> 0.05 %
Special Flavonoid Fraction	> 0.18 %
Including Vicenin-2	> 4.0 %
Methyleugenol (Phenylpropene):	not detected (Limit: 0.1 ppm)
Myristicin (Phenylpropene):	not detected (Limit: 0.1 ppm)
Perillaketone (Terpenoid):	not detected (Limit: 0.1 ppm)
Microbiology: Ph. Eur. 7ed Cat. 5.1.4	complies