



FARAVELLI GROUP
ΕΛΒΑΛΕΓΓΙ ΟΜΟΝΗ

NUTRA

Feel good with us!

Oximacro[®]

A cranberry extract with a high content of proanthocyanidins
A (PAC-A)



Oximacro[®]

FLUID AND POWDERED CRANBERRY (*Vaccinium macrocarpon*)
EXTRACTS WITH THE HIGHEST CONTENT OF
PROANTHOCYANIDIN A ON THE MARKET

Major advantages of Oximacro

The quantitative chemical characterization is based on the DMAC method, whereas the qualitative analysis is performed by liquid chromatography coupled to mass spectrometry for the accurate identification and quantification of PAC A

The analytical methods used ensure a high quality of Oximacro bioactive compounds

The precise quantification allows the exact and reliable formulation of products based on cranberry extracts for the treatment of UTI

Oximacro contains the highest content of PAC A titrated with the DMAC method present on the market



biosfered

THE HIGHEST CONTENT OF PAC A ON THE MARKET

The cranberry extract produced using a Biosfered Srl proprietary technology is first titrated with the **DMAC method** to obtain the total amount of PACs and subsequently is analyzed by liquid chromatography coupled to mass spectrometry (HPLC-ESI-MS/MS) for the assessment of the content of the **PAC A** (and the possible presence of PAC B).

Oximacro-FL[®]



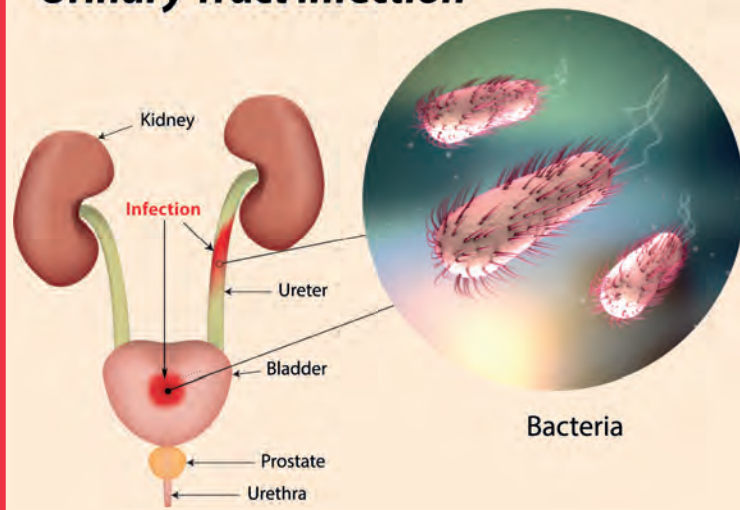
The liquid formulation allows the use of Oximacro in all fluid preparations. The high concentration of PAC A of the liquid extract allows reduction of the final product volume, while maintaining a high concentration of bioactive PAC A.

Oximacro[®]



The extractive technique at low temperatures developed by Biosfered S.r.l. allows to obtain also in the dried extract an enrichment of the bioactive PAC A fraction. The product is perfectly soluble in water and does not contain insoluble residues (e.g., maltodextrins, cell walls, etc.).

Urinary Tract Infection



In humans, administration of a cranberry dried extract standardized in PACs (DMAC) at doses containing **72 mg of PAC per day**, divided in two doses of 36 mg in the morning and evening, offers protection against bacterial adhesion and virulence in the urinary tract (Howell et al. *BMC Infect. Dis.* 2010, 10:94.)

Oximacro[®]

UTI and dosage of PACs

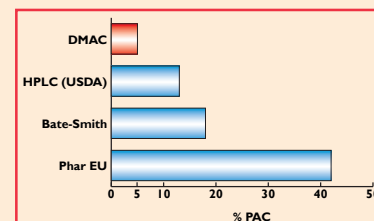
Oximacro[®] a comparison

Different methods have been used to quantify PACs in cranberry. The classical Bates-Smith and European Pharmacopeia methods depolymerize PACs and express their content on cyanidin chloride.

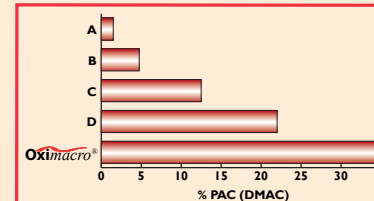
However, due to the complexity of the structures of PACs and the bonds of type A, the results can often be inaccurate and non-reproducible (see the comparison among methods).

The DMAC colorimetric method is more accurate than other methods and has been successfully used to quantify PACs of cranberry.

However, we have found that the DMAC does not distinguish PAC A from PAC B. On average, the content of PAC B is about 17-20% of the total PACs, but it can reach higher values, thus lowering the amount of bioactive PACs for UTI.



Comparison of analytical methods for the quantification of PAC in an extract standardized to 5% PAC equivalents of PAC-A2.



Oximacro is titrated with the DMAC method and has the highest percentage of total PAC on the market (with PAC A > 85% of total PACs). In the comparison, A ... D represent the best-selling cranberry extracts.

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