

Valorization of wine making by-products

New uses: additives, cosmetics, pharmacy...

OBJECTIVES

- ✓ Demonstrate the economic potential and ecological of wine by-products with a bibliographic research.
- ✓ Gain deep knowledge in resveratrol and its possible benefits in the organism.
- ✓ Evaluate the European and American status of the resveratrol as an ingredient.

BY-PRODUCTS

- **Stalks and pomace (12,5%)** → animal feed, additives, grappa, biofuel, energy
- **Grape seeds (20~30%)** → additives, grape seed oil, biofuel
- **Yeast lees** → pigments, β -glucan, citric acid

RESVERATROL

- Polyphenolic compound → stilbene
- Present in grapes, peanuts and red fruits
- Demonstrated Organism Effects: Antioxidative, LDL↓, cancer prevention, cardiovascular disease reduction.
- Economic potential of 40M€



EFSA Status

DSM sent a consult regarding the safety of synthetic *trans*-resveratrol.

Consult → ✓ → NOAEL: 750 mg/kg day/bw

FDA Status

GRAS since 2007 in bottled water. Max. Concentration 10 mg/L



Conclusions:

- By-product valorization is a high potential process.
- Most of resveratrol benefits have not been demonstrated with solid evidence.
- Even though wine by-products receive a valorization it is important to achieve more profitable processes.
- Wine by-products valorization as well as other by-products is an effective way to maximize its potential.