

# II INTERNATIONAL SYMPOSIUM ON SCIENCE AND BIOTECHNOLOGY ENTREPRENEURSHIP AND INNOVATION

## USE OF PROBIOTICS IN COLORRETAL CANCER INDUCED BY 1,2- DIMETHYLHYDRAZINE IN ANIMAL MODEL: A REVIEW

1,\*Marceli Pitt Coser; 2,César Milton Baratto; 3,Jane Mary Lafayette Neves Gelinski;  
4,Claudriana Locatelli.

1. Nutricionista. Mestranda do Programa de Pós Graduação em Ciência e Biotecnologia  
Universidade do Oeste de Santa Catarina - Videira - marceli.nutricionista@yahoo.com.br

\*Corresponding Author - UNOESC, Videira.

2,3,4. Professores -Programa de Pós Graduação em Ciência e Biotecnologia.

### Abstract

Colorectal cancer is one of the most frequent in the Brazilian population. The available forms of treatment are associated with a high risk of complications, thus highlighting the need to elaborate new therapeutic strategies. Intake of probiotics may be a viable therapeutical option for the treatment of colorectal cancer. The goal of the present study was to review the use of probiotics in the treatment of colorectal cancer induced by 1,2-dimethylhydrazine in rats. This is a literature review of articles published between 1999 and 2017 in the pubmed database, with the descriptors: "probiotics", "colorectal cancer" and "dimethylhydrazine". Found 23 articles within the search inclusion criteria. The probiotic strains studied showed differences in type, concentration and mode of intervention. The use of probiotics was mostly isolated or associated with prebiotic fibers. The main benefits were: reduction of incidence and size of tumors, modulation of the microbiota in a positive way, better anti-inflammatory response and lower DNA damage. The need for more studies to provide more complete and delineated data, with mixtures of strains and specific amounts, provides more conclusive results on the real benefits of this type of supplementation in colorectal cancer.

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\*E-mail: [marceli.nutricionista@yahoo.com.br](mailto:marceli.nutricionista@yahoo.com.br)

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**Programa de Mestrado Acadêmico  
em Ciência e Biotecnologia**