

Tipo	Periódico
Título	Reduced Plasma Levels of Very-Long-Chain Dicarboxylic Acid 28:4 in Italian and Brazilian Colorectal Cancer Patient Cohorts
Autores	Paul L. Wood, Michelle M. Donohue, John E. Cebak, Taylor G. Beckmann, Márcia Cristina Fernandes Messias, Laura Credidio, Cláudio Saddy Rodrigues Coy, Patrícia de Oliveira Carvalho, Sara Crotti, Sara D'Aronco, Emanuele D.L. Urso, Marco Agostini
Autor (es) USF	Márcia Cristina Fernandes Messias, Patrícia de Oliveira Carvalho
Autores Internacionais	Paul L. Wood, Michelle M. Donohue, John E. Cebak, Taylor G. Beckmann, Sara Crotti, Sara D'Aronco, Emanuele D.L. Urso, Marco Agostini
Programa/Curso (s)	Programa de Pós-Graduação Stricto Sensu em Ciências da Saúde
DOI	10.3390/metabo8040091
Assunto (palavras chaves)	colorectal cancer; inflammation; very-long-chain dicarboxylic acid 28:4; familial adenomatous polyposis; high-resolution mass spectrometry; cancer biomarker
Idioma	Inglês
Fonte	Título do periódico: Metabolites ISSN: 2218-1989 Volume/Número/Paginação/Ano: v. 8, p. 91, 2018.
Data da publicação	6 December 2018
Formato da produção	Digital https://doi.org/10.3390/metabo8040091
Resumo	Background: There are currently no blood-based biomarkers for early diagnosis of colorectal cancer. Previous research has suggested that very-long-chain dicarboxylic acid (VLCDCA) 28:4 might be such a biomarker. Methods: Using high-resolution mass spectrometry, we analyzed VLCDCAs 28:4 in the plasma of colorectal cancer patients in Italian [$n = 62$] and Brazilian [$n = 52$] cohorts. Additionally, we investigated individuals diagnosed with familial adenomatous polyposis (FAP; $n = 27$), one of the most important clinical forms of inherited susceptibility to colorectal cancer. <i>Results:</i> Decrements in plasma levels of VLCDCAs 28:4 were monitored in colorectal cancer patients. These decreases were independent of the stage of tumor development and the individual's age. However, no decrements in VLCDCAs 28:4 were monitored in FAP patients. <i>Conclusions:</i> The plasma levels of VLCDCAs 28:4 represent a potential biomarker of sporadic colorectal cancer. In addition, it is possible that resupply of this anti-inflammatory lipid may represent a new therapeutic strategy for CRC and inflammatory disorders.
Fomento	