

Pharmacogenetics, tobacco, alcohol and its effect on the risk development cancer

Farmacogenética, tabaco, alcohol y su efecto sobre el riesgo de desarrollar cáncer

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© 2018, Sociedad Chilena de Pediatría. All rights reserved. Cancer is the second leading cause of death in the world, causing 8.8 million deaths in 2015 according to the World Health Organization (WHO). Risk factors for cancer include smoking and alcohol consumption. In Chile, 33.6% of the population and 21.2% of young people smokes. Alcohol consumption in the Chilean population is 74.5% and 12.2% in young people. Among the physiological factors that influence the development of cancer, the genetic factor plays a relevant role. It has been shown that the presence of genetic polymorphisms that alter the ability of the body to eliminate contaminants increase the risk of developing cancer. The same applies to polymorphisms that prevent DNA repair due to damage caused by environmental pollutants such as cigarette smoke. The objective of this review is to analyze the state of the art of the relationship between pharmacogenetics, smoking, and alcohol consumption as risk factors for the devel