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Acetaldehyde-related pathology: bridging the trans-disciplinary divide **Titolo** 

// [chair, Peter Emery]

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EmeryPeter <1953-> Altri autori (Persone)

> ChadwickDerek GoodeJamie

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Nota di contenuto Acetaldehyde-Related Pathology: Bridging the Trans-Disciplinary

Divide; Contents; Chair's introduction; Acetaldehyde generating enzyme systems: roles of alcohol dehydrogenase, CYP2E1 and catalase, and speculations on the role of other enzymes and processes; Removal of acetaldehyde from the body: Acetaldehyde, polymorphisms and the cardiovascular system; Acetaldehyde and alcoholic cardiomyopathy: lessons from the ADH and ALDH2 transgenic models; Interrelationship between alcohol, smoking, acetaldehyde and cancer; Effects of acetaldehyde on human airway constriction and inflammation The role of acetaldehyde in alcohol-associated cancer of the gastrointestinal tractThe determination of acetaldehyde in exhaled breath; Ethanol and acetaldehyde: in vivo quantitation and effects on cholinergic function in rat brain: Pharmacological treatments and strategies for reducing oral and intestinal acetaldehyde; Alcoholic myopathy and acetaldehyde; Acetaldehyde adducts in circulation; General discussion; Pancreatic MAP kinase pathways and acetaldehyde;

Acetaldehyde alters MAP kinase signalling and epigenetic histone

modifications in hepatocytes

## Sommario/riassunto

Endogenous a-oxoaldehydes and formation of protein and nucleotide advanced glycation endproducts in tissue damageMeasurement of acetaldehyde: what levels occur naturally and in response to alcohol?; Final discussion; Contributors Index; Subject index

Part of the prestigious Novartis Foundation, this is the first book to review the pathology associated with acetaldehyde, a known toxic agent found in cigarette smoke and other pollutants and derived from ingested alcohol, amongst other sources. In the body, acetaldehyde affects several tissues, particularly the brain and liver, causing various diseases, including cancer, alcoholic liver disease and Alzheimer's. Acetaldehyde-Related Pathology describes the toxic effects of acetaldehyde at the tissue and cellular levels, reviewing enzyme biochemistry, transgenic mouse models of