



Biochemistry of Prenatal Alcohol Exposure

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This book reviews the biochemical pathways of ethanol and its metabolites in humans in the context of pregnancy. It is intended for obstetricians, gynaecologists, and health professionals working in the field of pregnancy care, aiming to provide answers to the questions as to why and how alcohol consumption during pregnancy is risky for the fetus.

Special emphasis is devoted to the implications for fetal and neonatal development. The review covers primary direct effects of ethanol as well as downstream effector pathways involving modulation of receptor and hormonal signaling, and the enzymatic status of the unborn child. Attention is also given to the effects of maternal alcohol consumption on the status of highly relevant nutrients such as folate, unsaturated fatty acids and zinc.

The book concentrates on the biochemical pathways behind the manifestations of maternal alcohol in the neural development, physiological regulation and the immune competence of the fetus and the neonate. It also discusses the relatively new concept of *in utero* programming of fetal development.

An extensive reference list facilitates up-to-date access to the scientific literature.