

One may also estimate the daily exposure to methanol (meaning total methanol passing through the body from all sources, endogenous or exogenous) by using the mean level of methanol in the blood and its total clearance. The concentration of methanol in human blood is in the range of 0.3–2.4 mg/L,^{33,35–37} while the total clearance is approximately 0.21–0.3 L/min.³⁸ Therefore, the exposure of methanol would be in the range of 0.09–0.72 mg/min ($0.3 \text{ L/min} \times 0.3\text{--}2.4 \text{ mg/L}$) or 0.13–1.03 g/day. Since we know that in humans, after uptake and distribution, the majority of the methanol is oxidized by liver alcohol dehydrogenase to formaldehyde (Fig. 1), in principle, metabolizing 0.12–1.03 g of methanol, generates 0.11–0.96 g of formaldehyde per day (using molecular weight equivalents). As will be discussed in the following section, this amount is a small fraction of formaldehyde in systemic circulation, which suggests that environmental exposure to formaldehyde and methanol is insufficient to account for the total circulating levels of formaldehyde and the daily turnover of formaldehyde. An obvious source is metabolic processes in the body that produce formaldehyde such as various *O*- and *N*-demethylation reactions of endogenous and