ERRATUM

Please stick this seal on upper paragraph of page11, Volume3, Number1, Environmental Health and Preventive Medicine April 1998, because one line of this paragraph was lost.

oxidizable substrate[17].

Phenolic compounds have excellent antioxidant properties in some *in vitro* and *in vivo* model systems[5]. Lawlor and O'Brien[9] have shown that astaxanthin acts as an antioxidant in chicken embryo fibroblasts treated with paraquat. Rong *et al.*[19] also studied the action of *Ginkgo biloba* extract as an antioxidant using the models of oxidative stress induced by BHP. Therefore, by using *in vitro* model systems, we assessed the antioxidant capability of MEBB against BHP-induced oxidative stress in WI-38 cells. During the period when oxidative stress was induced by BHP, the cells enhanced free radical scavengers such as SOD, catalase, and GSH-Px (Fig. 1a-1c). The increases of these enzyme activities may be due to their leakage by mitochondria or peroxisome injury. Incorporation of BHP into the MEBB (45-450 μg/ml) treated cells, resulted in a reduction of SOD activity (Fig. 1a). In the case of catalase activity, a similar trend occurred except in the cells incubated in 112.5 μg/ml MEBB (Fig. 1b). MEBB may inhibit the injury of mitochondria. The reason for the increase of catalase activity in 112.5 μg/ml MEBB is still unknown. Further studies on lipid peroxidation and cell viability are indicated. GSH-Px activity increased beyond the control level (Fig. 1c) due to BHP being a substrate for GSH-Px. These results imply that MEBB exhibited free radical scavenging activities in our model.

In conclusion, we have shown that the ingredients of MEBB have strong hydrogen-donating abilities and are good scavengers of active oxygen species, including superoxide and hydrogen peroxide. Moreover, through the use of oxidative stress models, the ingredients of MEBB may decrease oxidative stress in WI-38 cells. These properties seem to be important in explaining how the antioxidant activity of MEBB arises.