## Supplementary information and data

| Antibody | Catalog | Company | Dilution |
| :--- | :--- | :--- | :--- |
| Catalase | C0979 | Sigma Aldrich | $1: 3000$ |
| SOD 1 | sc-11407 | Santa Cruz Biotechnology | $1: 2000$ |
| $\gamma$-GCS | sc-22755 | Santa Cruz Biotechnology | $1: 1000$ |
| MGST | sc-138 | Santa Cruz Biotechnology | $1: 200$ |
| GPX 3/5/6 | sc-55102 | Santa Cruz Biotechnology | $1: 200$ |
| G6PD | 8866 | Cell Signaling | $1: 1000$ |
| Actin | A3854 | Sigma Aldrich | $1: 10,000$ |

Supplementary table 1. Antibodies used in Western blots studies in the present work SOD, Superoxide dismutase; g-GCS, g-glutamylcysteine synthetase; MGST, mammal Glutathione S transferase; GPX, Glutathione peroxidase. G6PD, Glucose-6-Phosphate Dehydrogenase
A)

B)
C)

Chow
HC


Chow HC


Supplementary figure 1 Cholesterol induces oxidative stress in primary mouse hepatocytes. Peroxides content determined by DCFH fluorescence in, (A) chow and, (B) HC hepatocytes. (C) Quantification of $2^{\prime}, 7$ '-dichlorofluorescein fluorescence, data are reported as fluorescence arbitrary units (FAU). (D) Protein oxidation determined by oxyblot. Images are representative of at least three independent experiments. Each column represents mean $\pm$ SEM of at least four independent experiments. ${ }^{*} p<0.05$ vs chow diet.


Supplementary figure 2 HGF effect on antioxidants enzymes. Densitometric analysis of Western blots of figure 4. (A) $\gamma$ - gamma glutamyl cysteine sinthetase ( $\gamma-\mathrm{GCS}$ ); (B) GSH peroxidase (GPX) 3/4/5; (C) mammal GSH S transferase (MGST); and (D) glucose-6-phosphate dehydrogenase (G6PD). Each column represents mean $\pm$ SEM of at least four independent experiments. ${ }^{*} p<0.05$ vs not treated Chow cells, $\# p<0.05$ vs not treated HC cells.

