Methionine Synthase Links Oxidation Stress to Epigenetic Regulation

- Methionine Synthase
- SAM (S-Adenosylmethionine)
- SAH (S-Adenosylhomocysteine)
- Vitamin B12
- Folate
- tHcy (Homocysteine)
- EPIGENETIC REGULATION
  - Decreased DNA Methylation
  - Altered Gene Expression
  - Normal DNA Methylation
  - Normal Gene Expression

Oxidative Stress w/ HFCS, OP, or Metals - Pb, Hg, Cd

Glutathione (GSH) System Disruption with Deficit in Selenium Availability (Hg>Se) and PON1 Inhibition

SAM SAH

Methionine Synthase

Normal Glutathione (GSH)