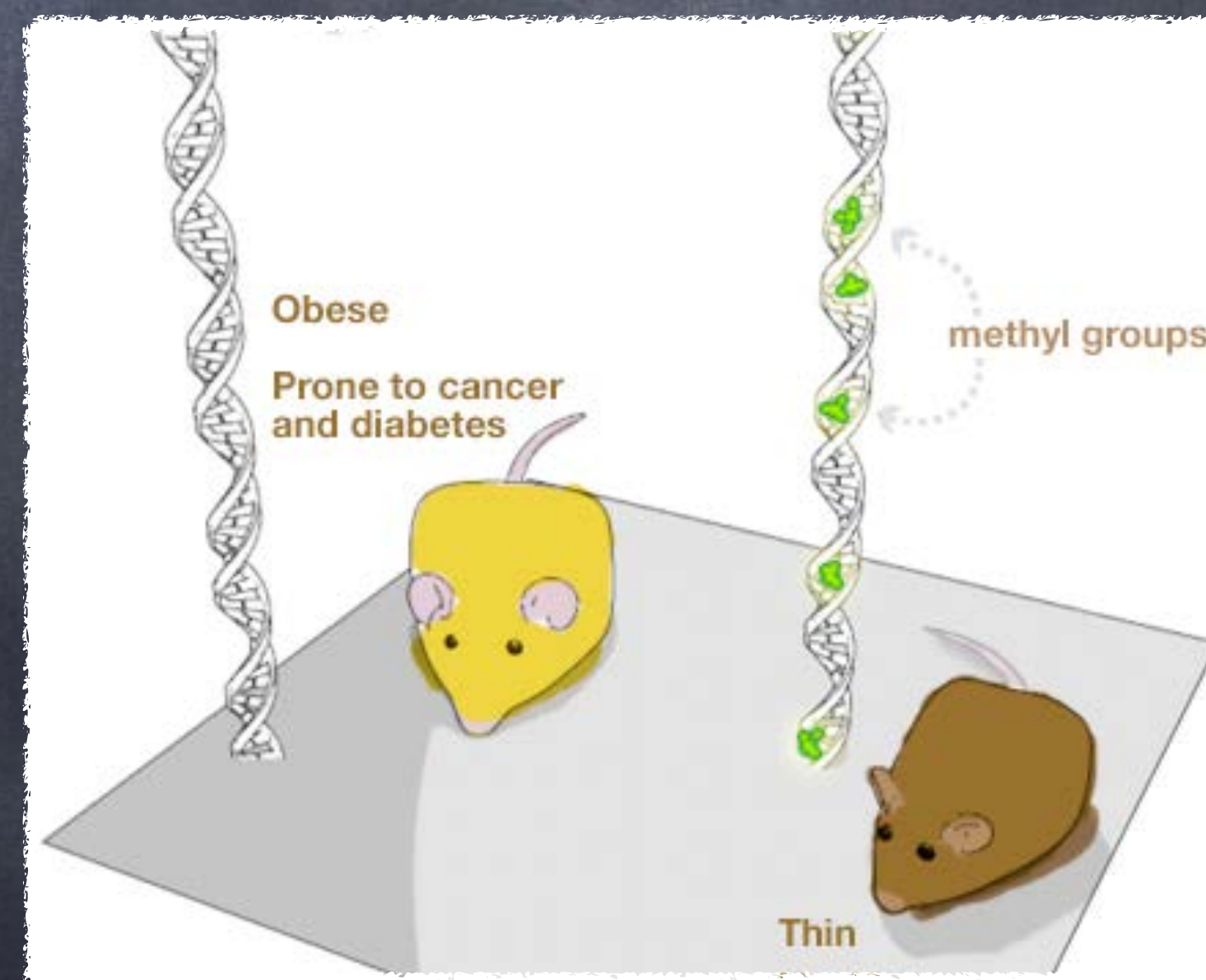
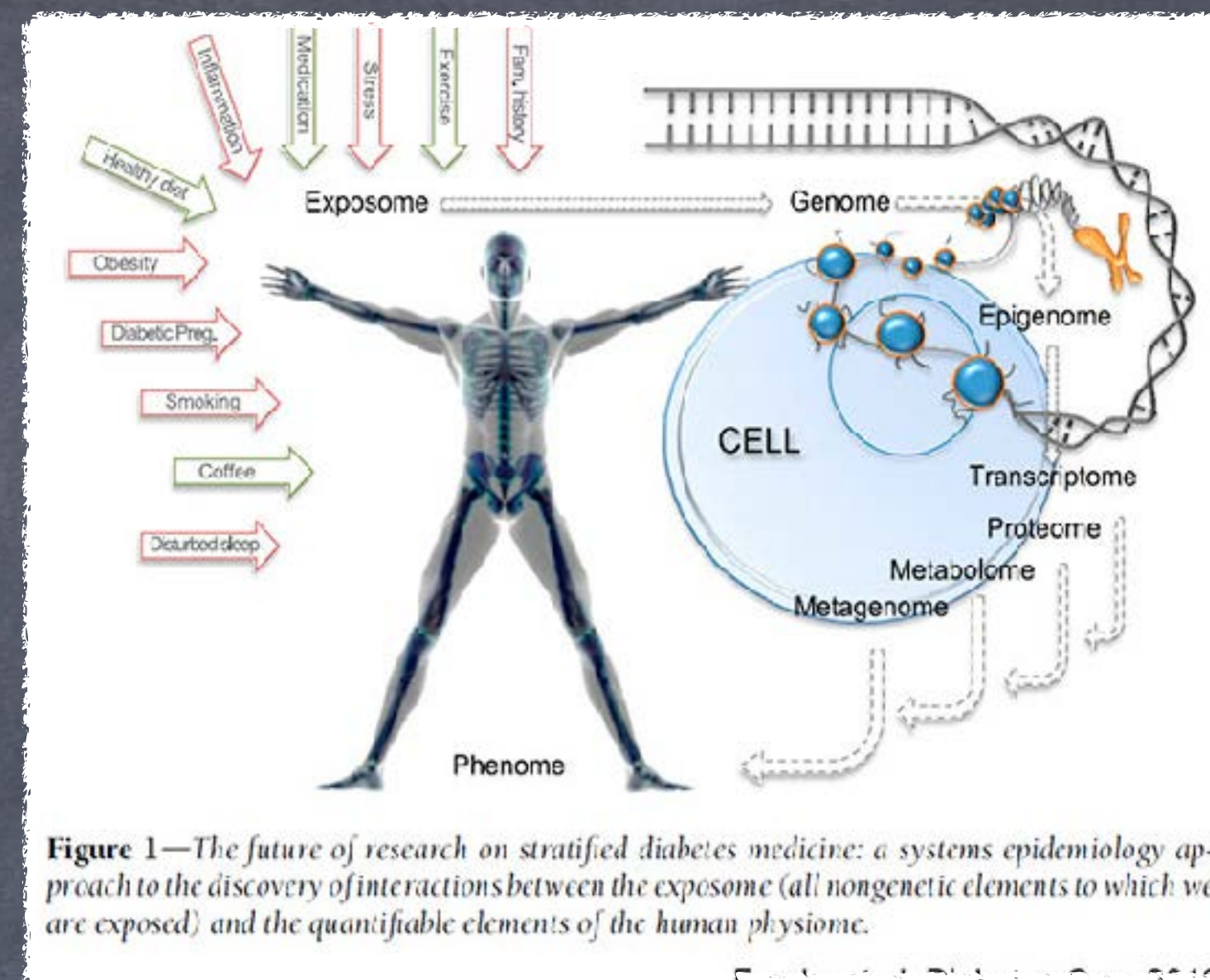
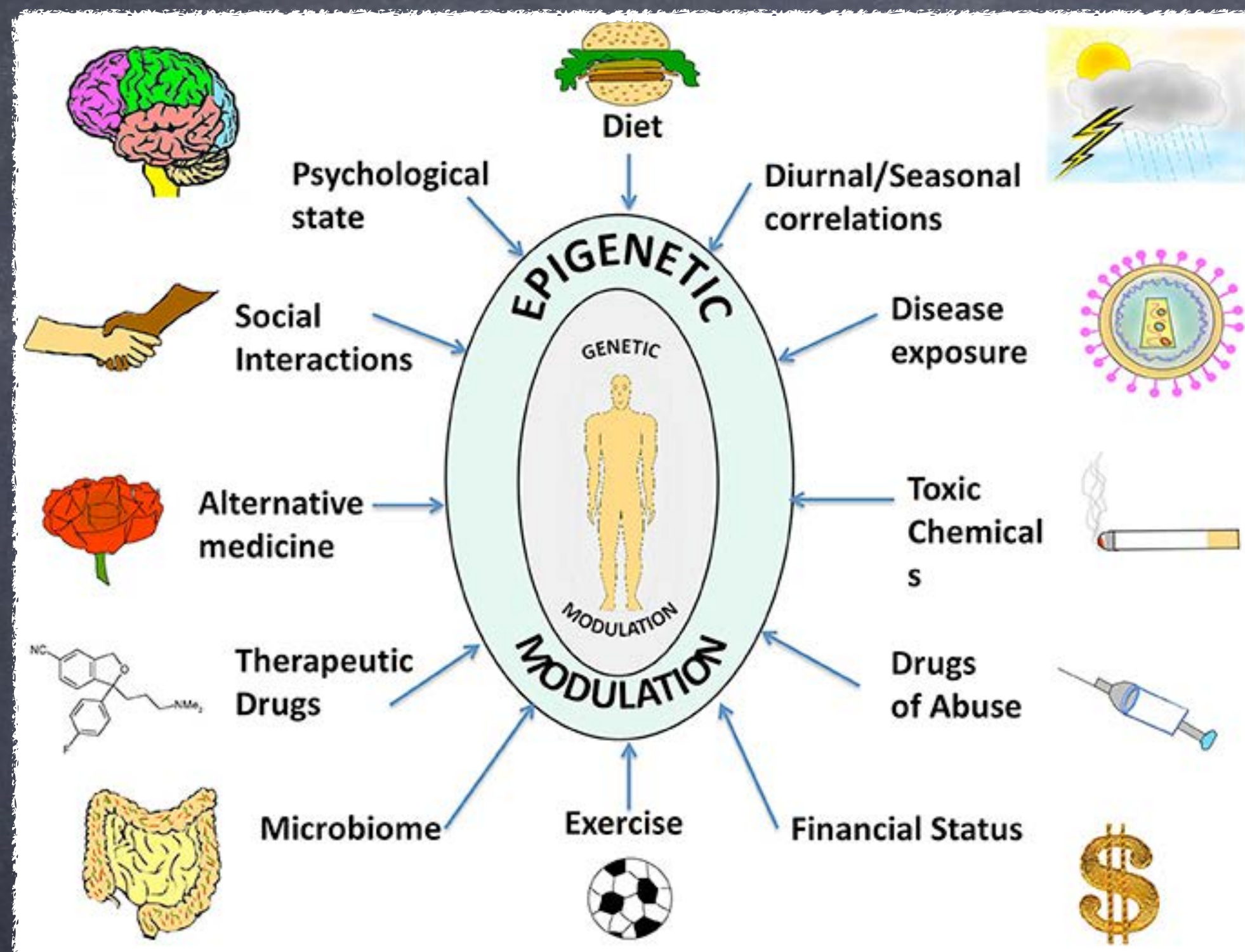


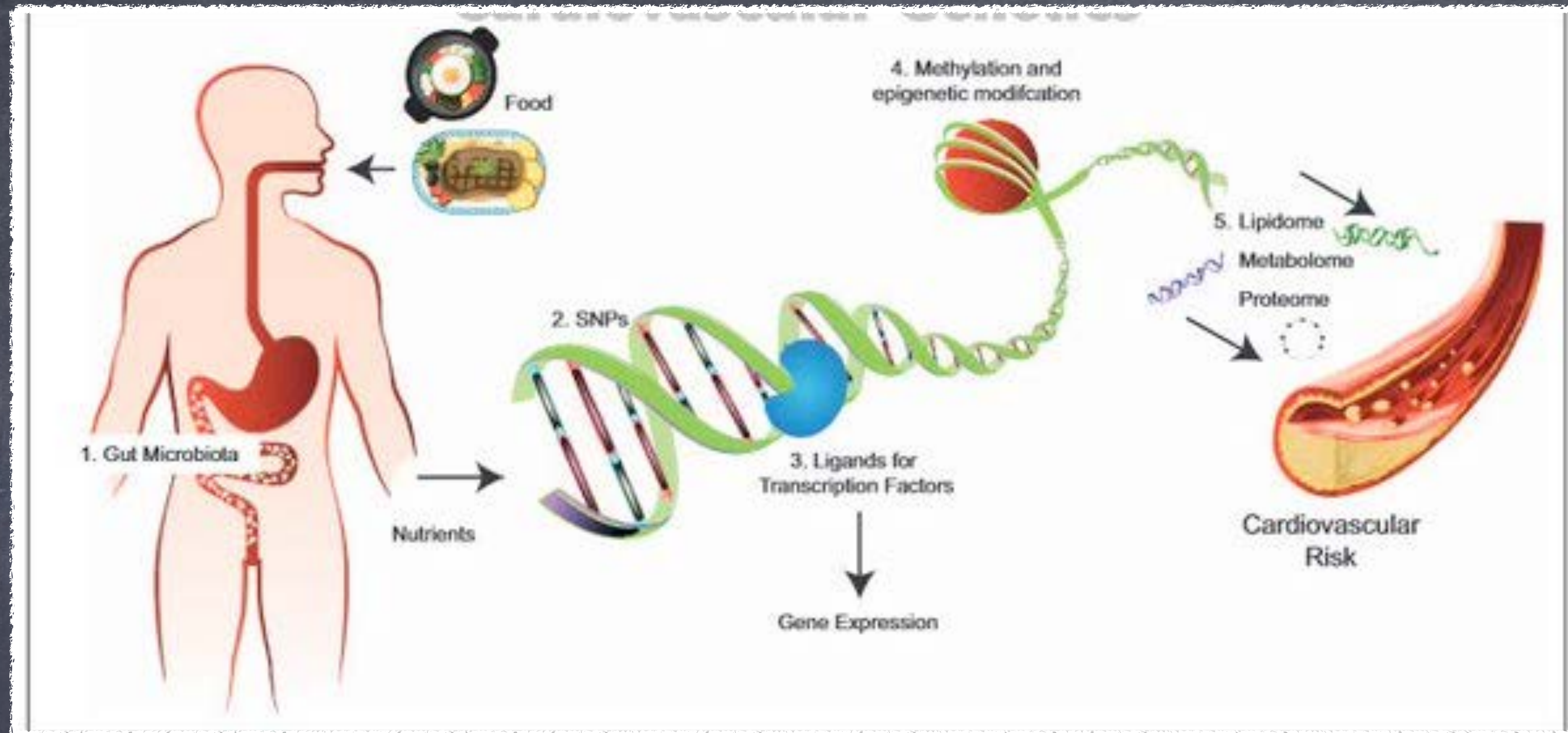
Eat to Change Your Genetic Future

Scott Stoll, M.D.
Chief Medical Director, Rouxbe
Co-Founder, Plantrician Project



Epigenetics

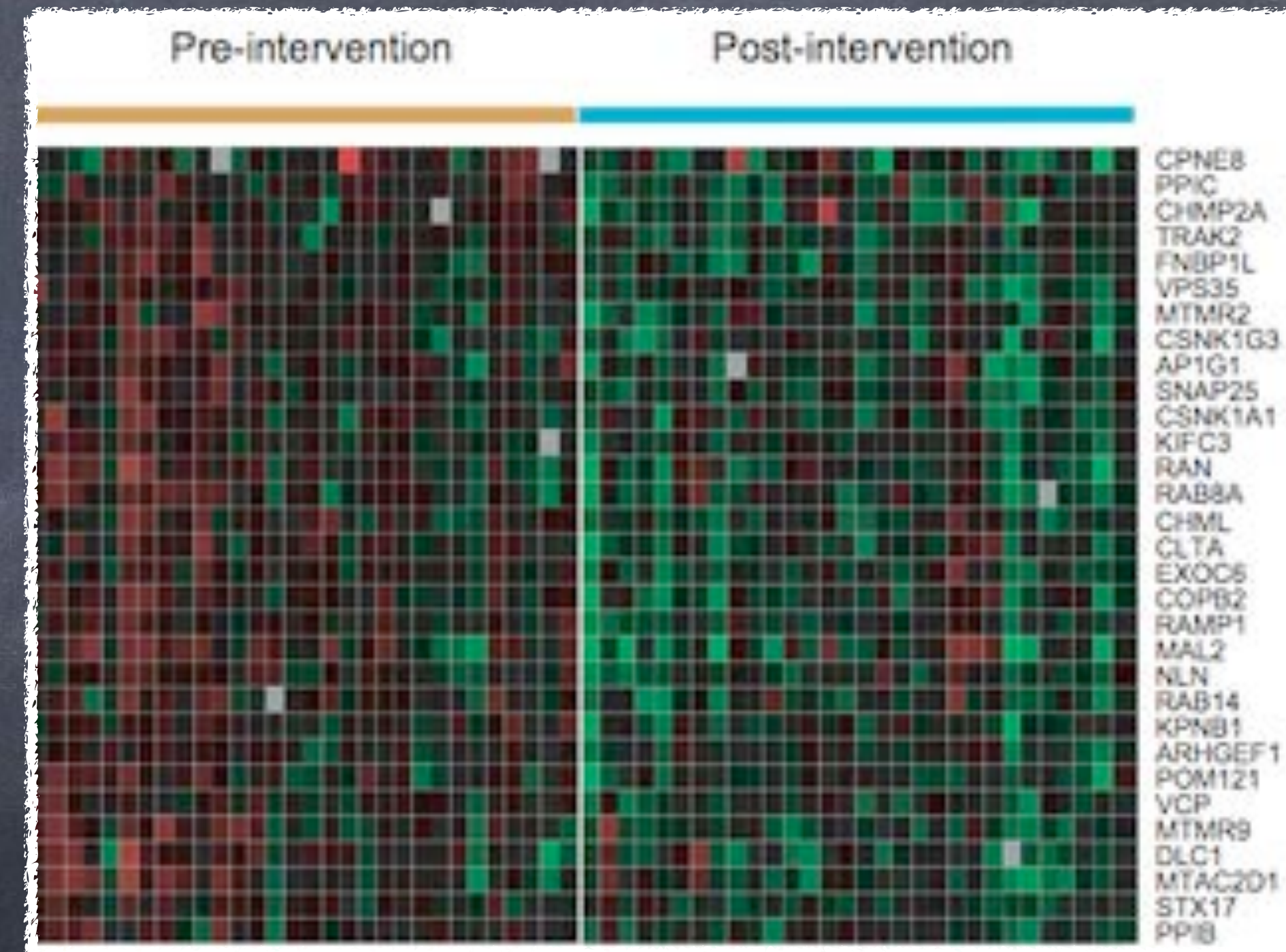




Micronutrients alter gene
expression

Dean Ornish Studies

- Men with prostate cancer plant based diet and lifestyle intervention
- >500 genes positively altered
- Turned on **48** off **456**

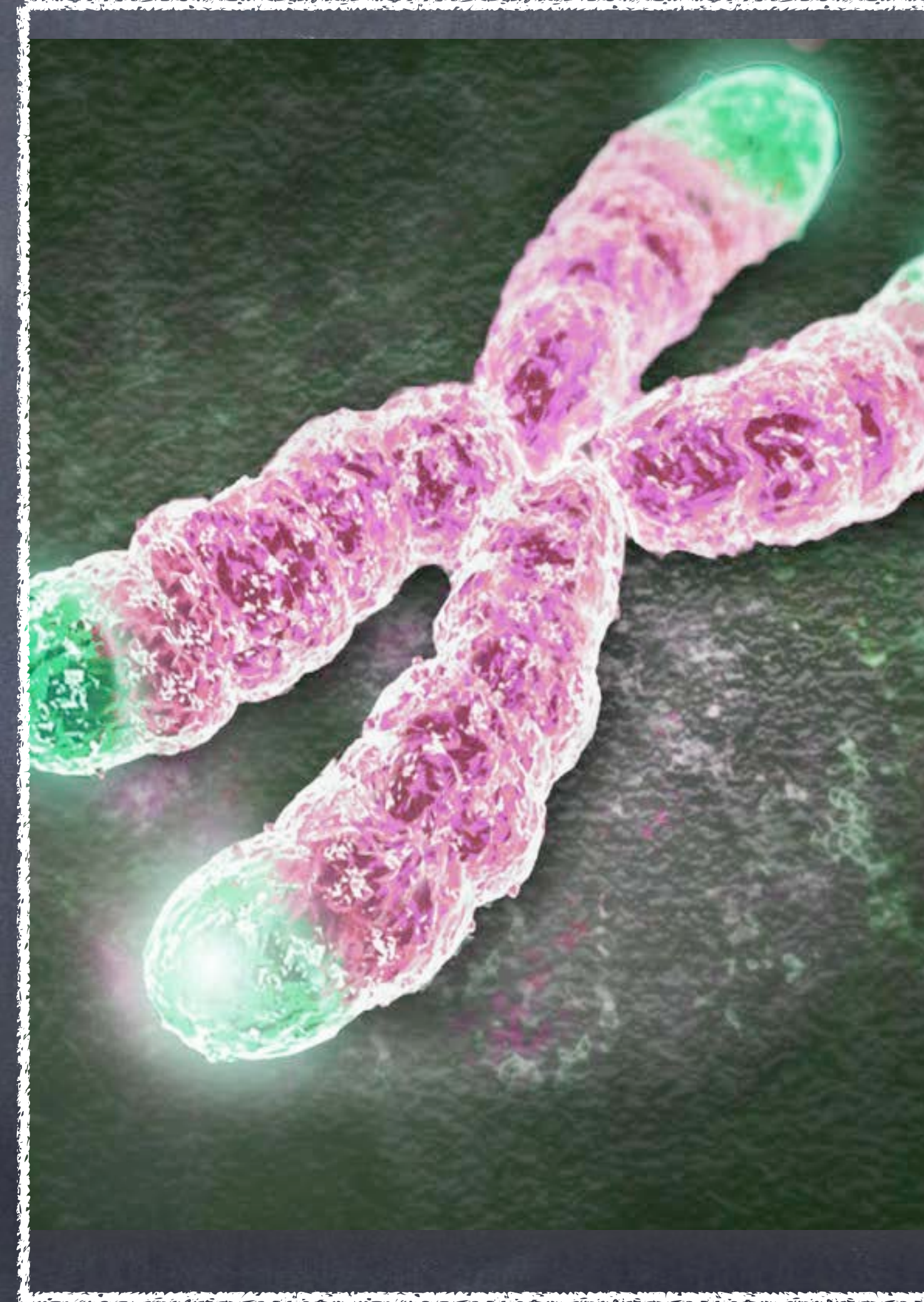


Altered Aging and health

Shortening of telomere associated
with aging, disease and premature
death

Lifestyle Intervention

Lengthening of telomeres at 5
years



Ornish, Dean, et al. "Effect of comprehensive lifestyle changes on telomerase activity and telomere length in men with biopsy-proven low-risk prostate cancer: 5-year follow-up of a descriptive pilot study." *The lancet oncology* 14.11 (2013): 1112-1120.

Research

- Calorie Restriction improves longevity and age related diseases
- Stress during pregnancy increases susceptibility neurologic diseases
- Gambian mothers altered diet weather changes in birthweight and disease risk
- Maternal gestational diabetes epigenetically increases risk of offspring with maternal diabetes
- Flavonoids modulates key genes in metabolism of fats and glucose

Research

- Green tea, cur cumin, grapes, increase DNA repair enzymes, turn off telomerase, down regulate expression of breast cancer
- Soy, bilberry, blueberries decrease DNA damage
- Green tea, broccoli reverse abnormal epigenome
- Resveratrol positively altered genes associated with breast cancer BRCA-1
- Turmeric induces cell death of breast cancer cells by modulating BRCA-1 protein expression

Research

- Restricting sugar turned off telomerase, inhibited cancer cell growth and spread and transformed some cells to normal
- 6 hours of high sugar exposure remembered by cells and organs in the body-metabolic memory
- Glucose restriction epigenetically impairs cancer cell growth





Power of Choice in our Hands Daily

Food
Stress
Activity
Exposure
Sleep

