Ingredient Epigenetic Figures
healthycell® supplement ingredients are in green boxes.
Main outcomes of interest are in grey boxes.
Black arrows are for intermediate steps (steps not involving a healthycell® ingredient directly)

Each arrow type refers to that specific step only.

For example, red algae inhibits DNA polymerase.

DNA Polymerase results in cell proliferation.

The figure at left can be interpreted as:
Red algae inhibits DNA polymerase, which is an essential step in cell proliferation; therefore, red algae inhibits cell proliferation.

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Optimal Aging: Inflammation

Antioxidants:
- Anthocyanins
- Ginkgo biloba
- Cruciferous vegetable concentrate
- Lycopene
- Rosemary extract
- Pine bark extract
- Lutein
- Astaxanthin
- Zeaxanthin
- Green barley grass
- Red algae
- Gotu kola
- Cordyceps senensis
- L-theanine
- Taurine
- Coenzyme Q10
- Spirulina
- Klamath blue-green algae
- Fucoxanthan seaweed

Omega 3-6-9
TGF-B
L-arginine
Green tea
Benfotiamine
SIRT6
NF-Kβ activation
TGF-B
IL-6
IL-1β
IKK
ROS
PGG-1a
NO
Beet root extract

Fenugreek seed
Sulfur
Curcumin
Resveratrol
AC-11® (Uncaria tomentosa)
T cell
TNFα
IL-6
COX
Optimal Aging: Mitochondria Health

- Alpha lipolic acid
- N-acetyl-cysteine
- Acetyl-L-Carnitine
- L-Glutamine
- Glutathione
- R+ Lipolic Acid
- L-Phenylalanine
- Benfotiamine
- L-Carnitine
- L-tyrosine
- Coenzyme Q10
- Nicotinamide ribose
- NAD+
- Fatty acid shuttle
- Citric acid cycle
- Electron transport chain
- Energy Production
- Oxidative stress
- Mitochondria Dysfunction

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Re-Entry Possible: DNA Damage, Repair, and Methylation

- UVB Rays
- Melatonin
- Lycopene
- 5-HTP
- Resveratrol
- Inositol Hexaphosphate
- Betaine
- S-adenosyl-methionine
- Gotu kola
- Astralagus root
- Quercetin dihydrate
- Oxidation
- SIRT1
- NRF2
- DNA-PK
- AC-11® (Uncaria tomentosa)
- DNA methylation
- Epigenetic modification
- DNA Repair
- DNA Damage

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Re-Entry Possible: mTOR Inhibitors

- Anthocyanins
- AMPK
- Rosemary extract
- Curcumin
- Lycopene/EPA
- P13K
- Akt
- Resveratrol
- Curcumin
- Green tea
- mTOR
- Quiescence
- Early Senescence

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References, continued


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