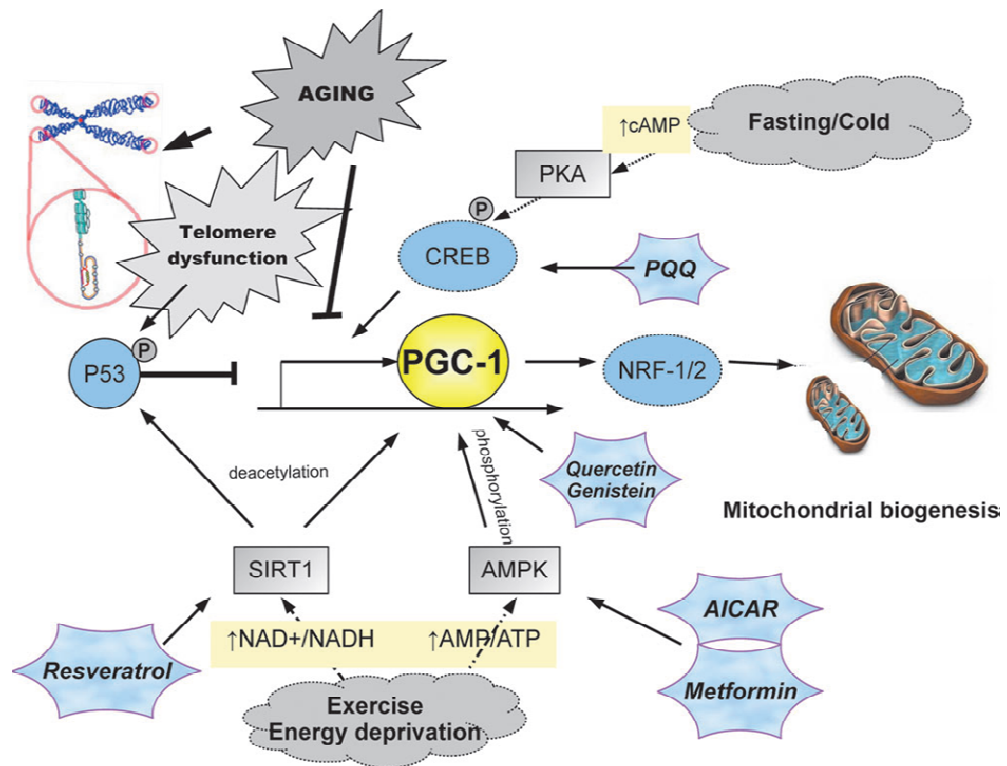




ETERNAL HEALTH

with
Dr. Michael Elstein

Dr Elstein's Anti-Ageing Highlight of the Week



This is a wonderful diagram showing the possible ways we can turn on what is possibly the key anti-ageing molecule. The yellow egg in the middle of your diagram is PGC-1 and what it does is promote what is known as mitochondrial biogenesis. Mitochondria are the batteries of our cells where energy is made. When mitochondria become dysfunctional due to the cumulative effects of free radical damage, which is unavoidable and incremental with ageing, our cells become dysfunctional and our bodies age. Preserving mitochondria, found on the right of this image, might go some way to slowing down ageing, facilitating longevity.

If PGC-1 is a substance which looks after mitochondria, what ignites PGC-1.

Stimulating PGC-1 to boost longevity:

Fasting	Resveratrol
Exercise	Genistein found in soy
Quercetin-a vitamin like compound found in onions	Pyrrloquinoline quinine
AICAR (5-aminoimidazole-4-carboxamide-1-β-D-ribofuranoside), an experimental drug	Metformin - a drug used to control blood sugar

Not all of these substances are freely available. How many of these should we incorporate and how much should we be taking or doing with regard to exercise and fasting? A lot of the above is derived from experimental studies on laboratory animals, like mice, so it's not clear how this translates to human activity in terms of dosages of the substances mentioned or actions we need to take. The authors indicate that moderate exercise may be the safest means to increase PGC-1. Stay tuned for further updates. Fascinatingly, as a post script, eating too much switches off PGC-1.