

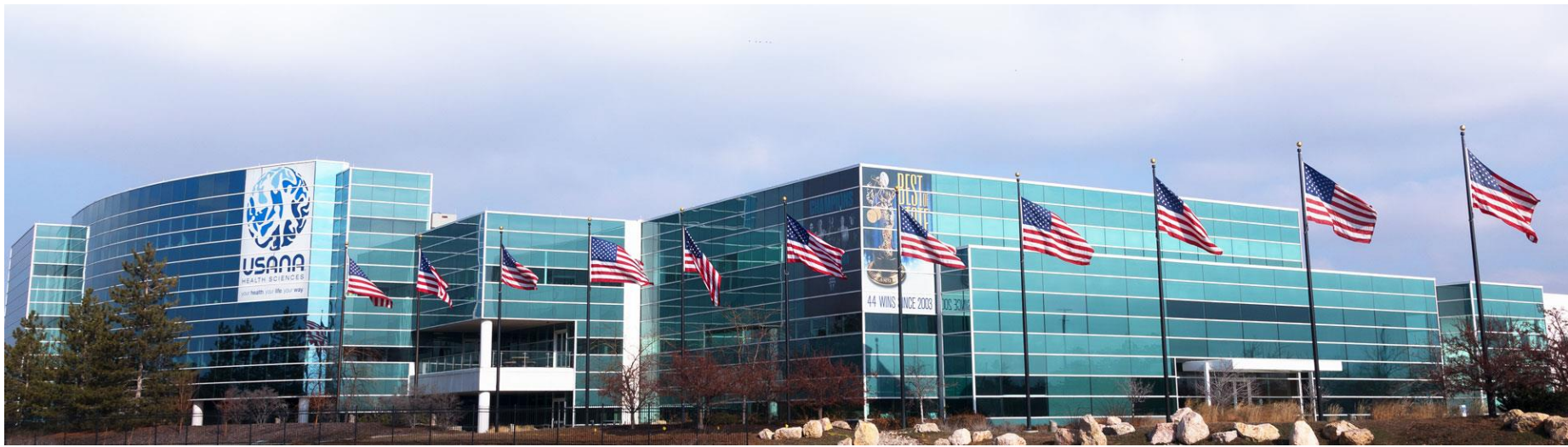
How to protect and help your cells with Incelligence Nutritional Technology

Dr Gerald Lewis

MB ChB, FRACP, FRCP(UK), MD(Otago)

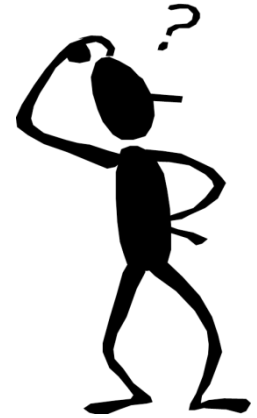
Physician, Clinical Pharmacologist and Cardiologist



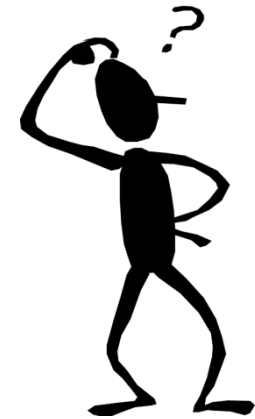


Why are the USANA Cellsentials so much better than all other supplements?



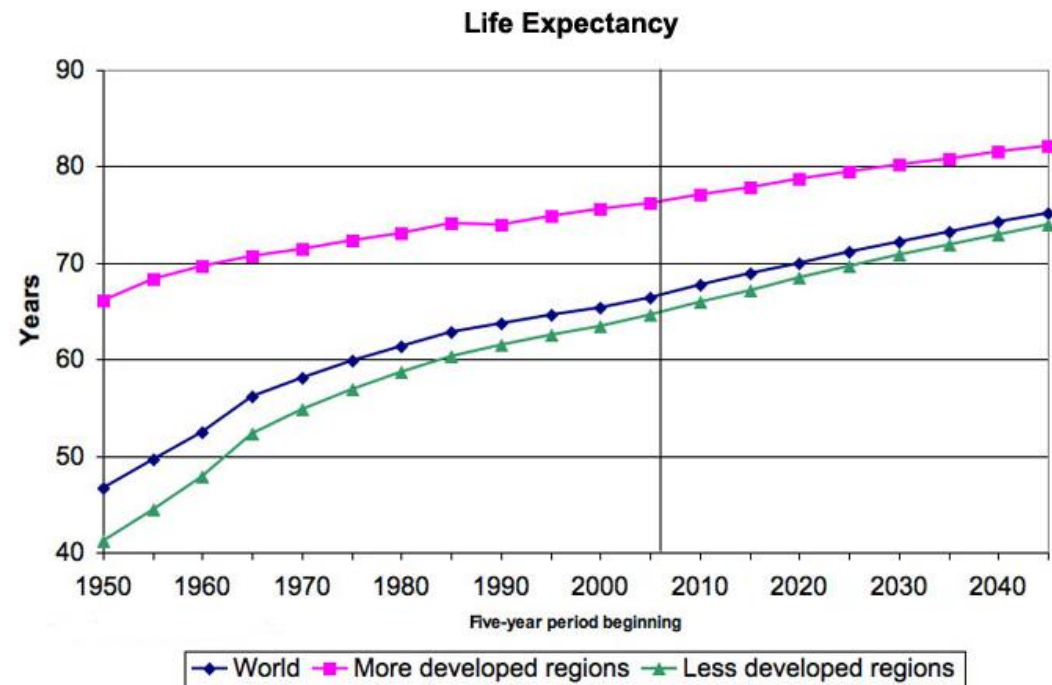


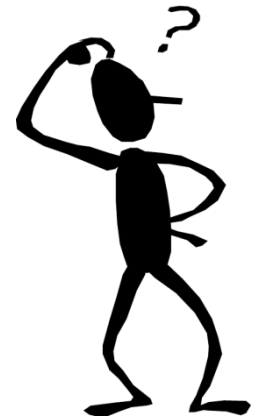
Medicine and governments have a real problem



Medicine and governments have a real problem

- People are growing older:





Medicine and governments have a real problem

- People are growing older
- As they age they develop diseases



Who is going to pay???

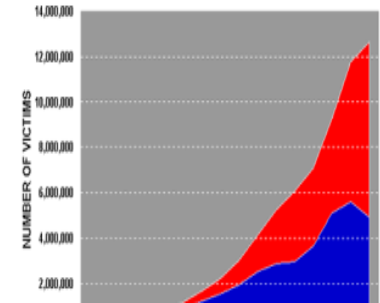


Medicine has an even greater problem

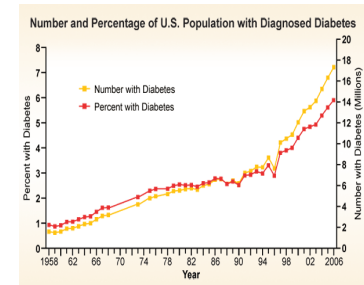
Chronic degenerative diseases

- Despite the \$trillions spent on
- Drugs, operations, other treatments
- They just continue to rise

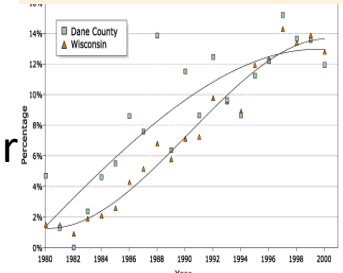
Alzheimer's



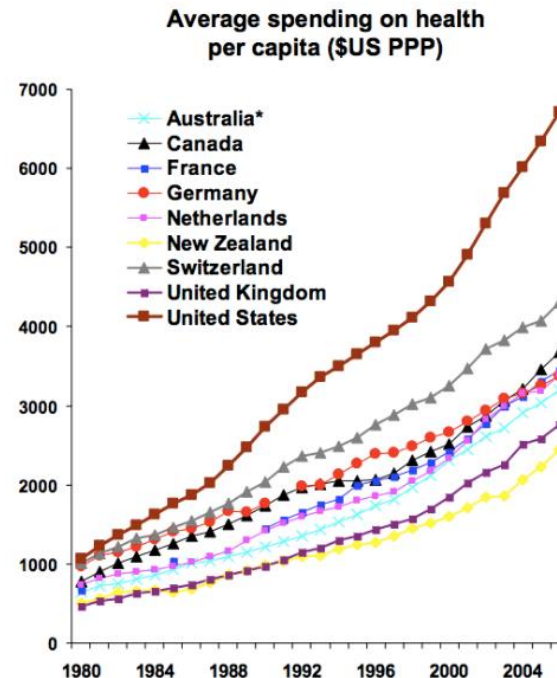
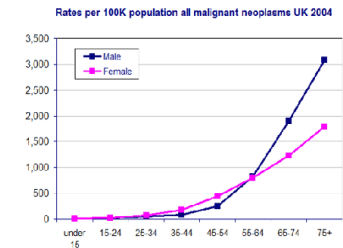
Diabetes



Cardiovascular



Cancer

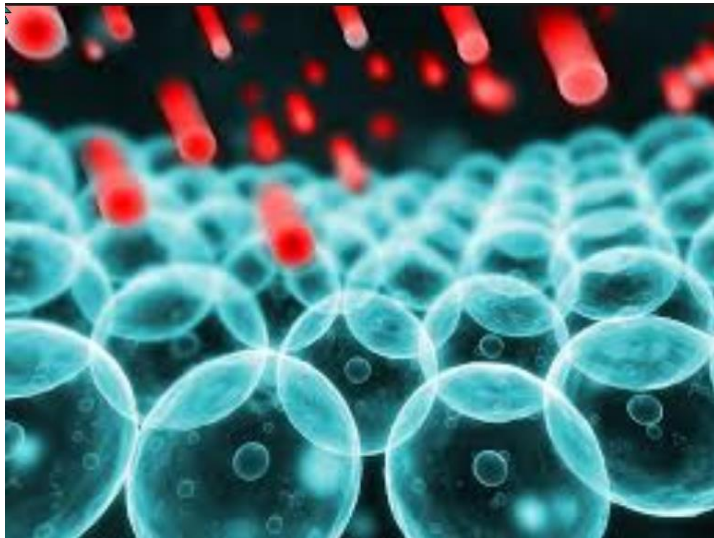
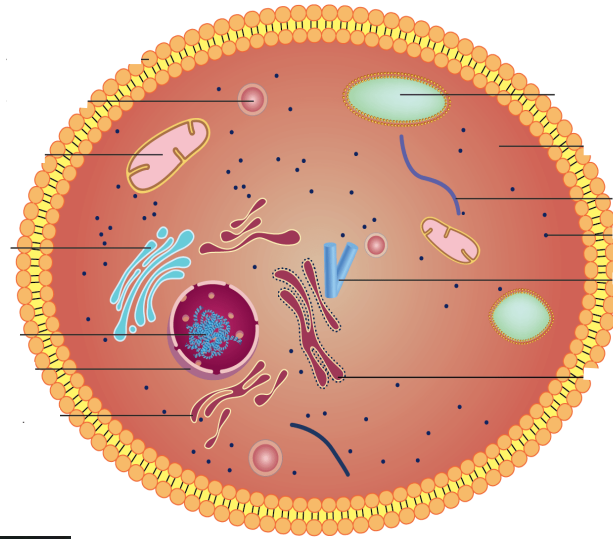
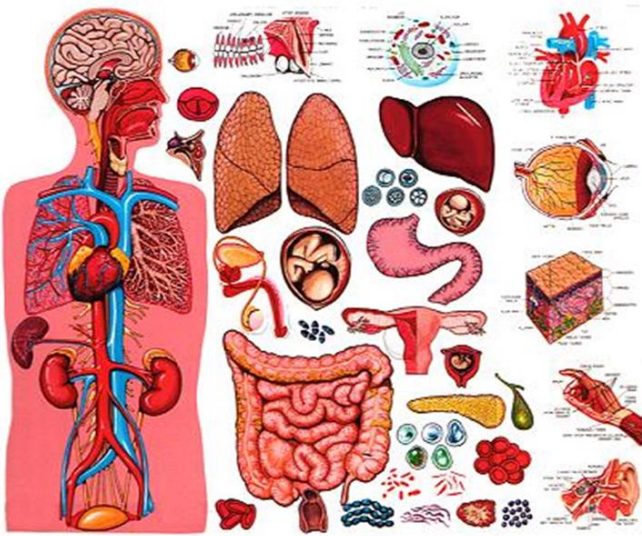


With the USANA Cellsentials – we
could possibly have an answer

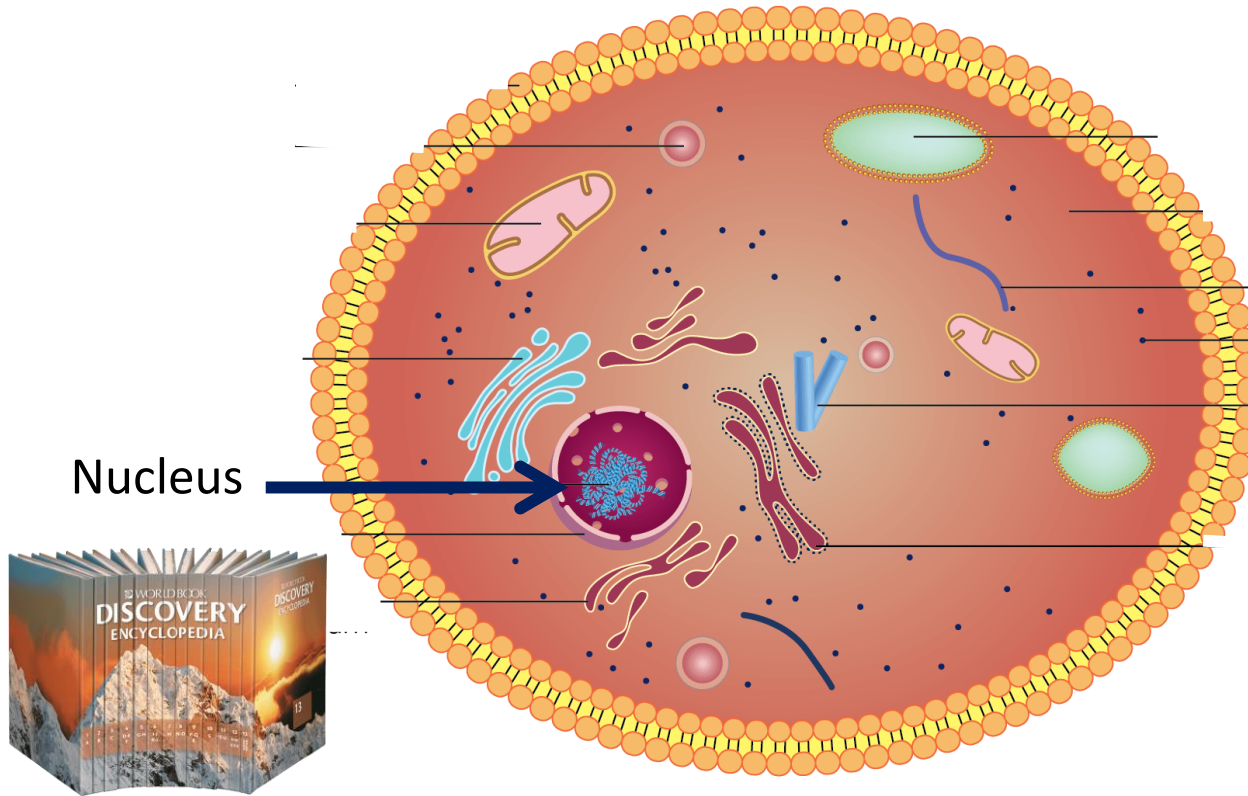
We all need to know about this.



To understand how – we need to understand our cells and how they respond to the outside world.



Every cell has at least 4 major components



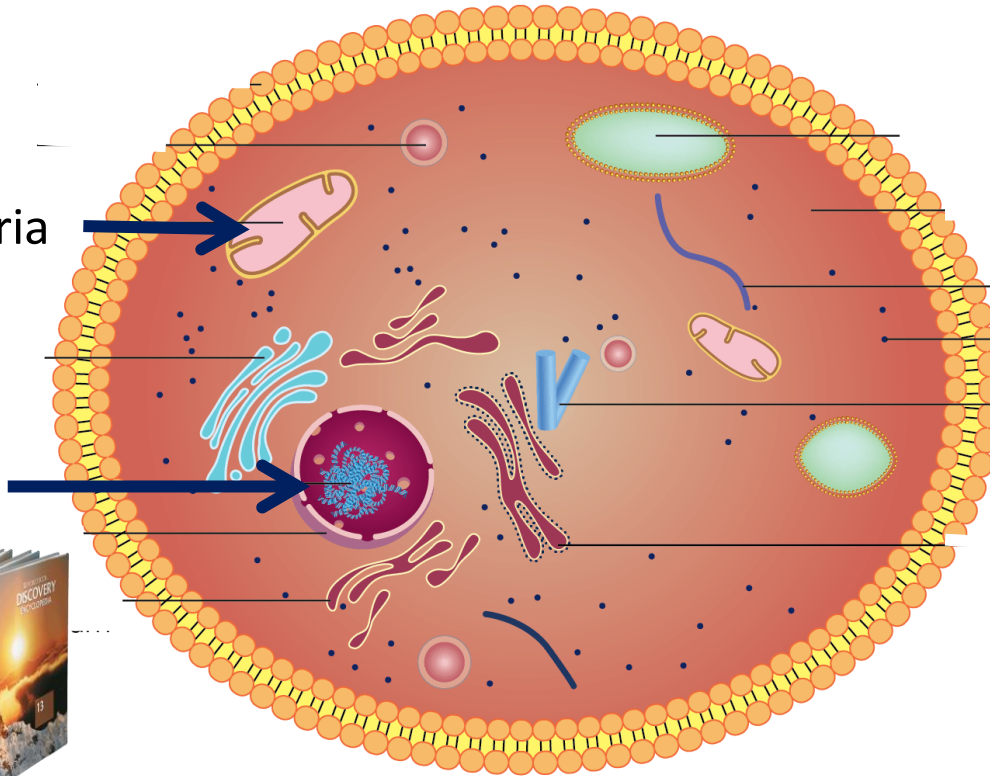
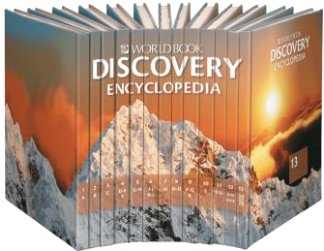
The nucleus – the DNA holds all the information for creating a body, organs, proteins

Every cell has at least 4 major components



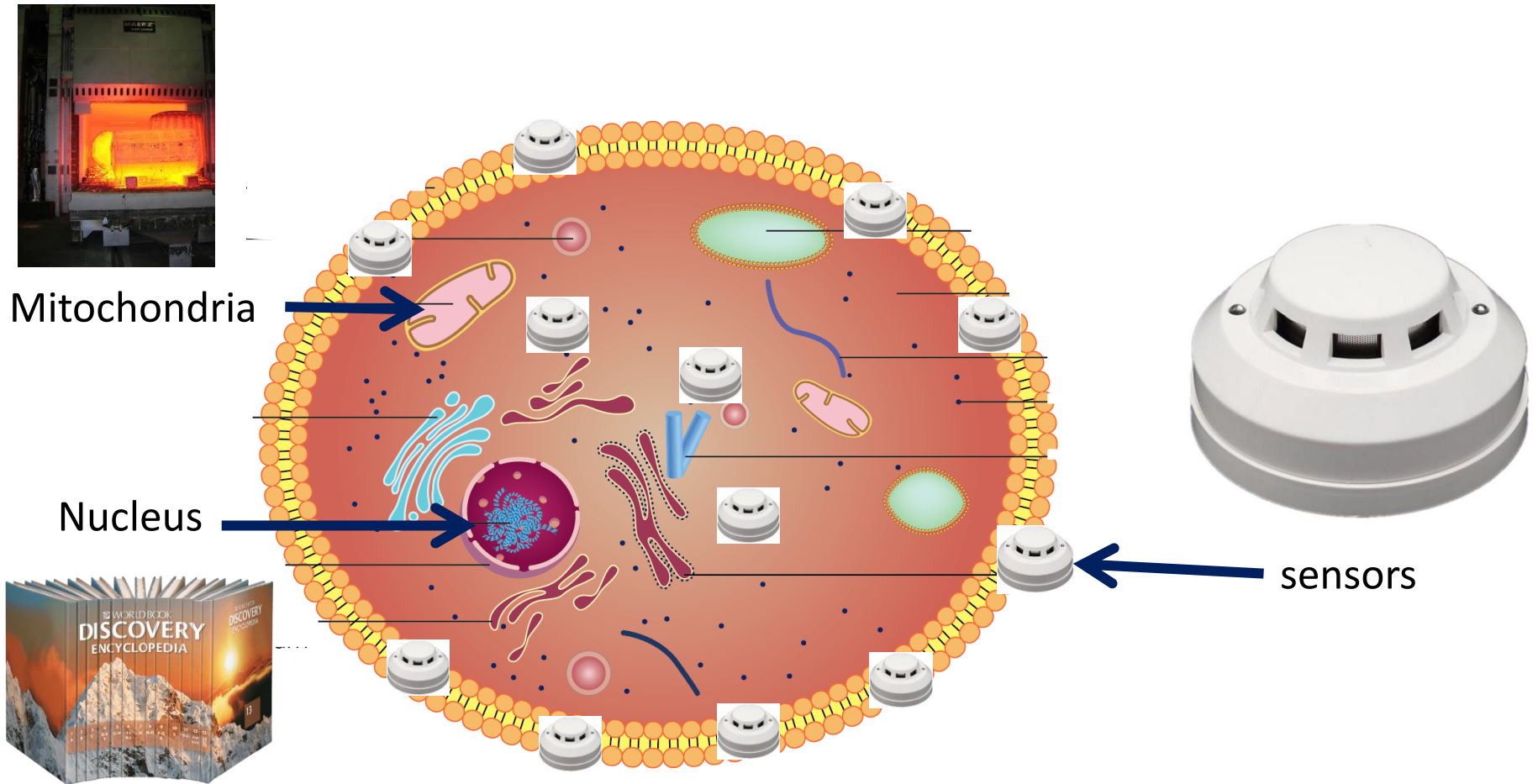
Mitochondria

Nucleus



The **mitochondria** are the energy furnaces – burn sugars and fat to give the cell energy

Every cell has at least 4 major components

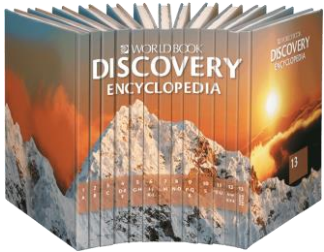


Sensors (like smoke detectors) which detect incoming objects. We have thousands of them on the cell wall and inside – viruses, glucose, toxins, FR

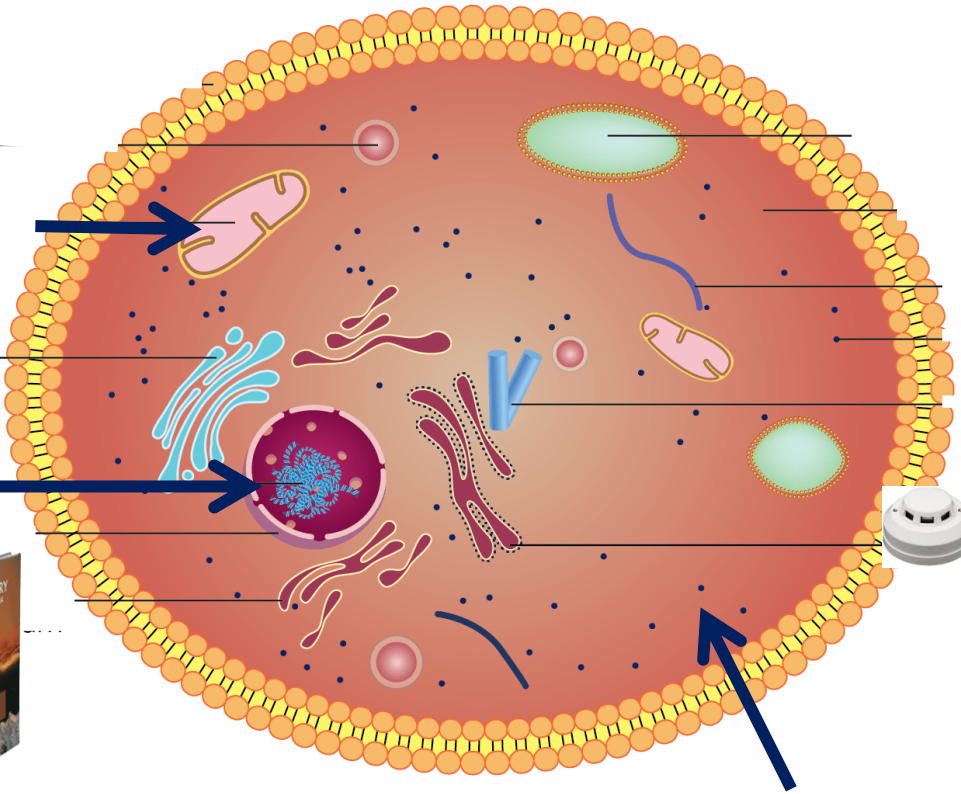
Every cell has at least 4 major components



Mitochondria



Nucleus



Ribosomes



sensors

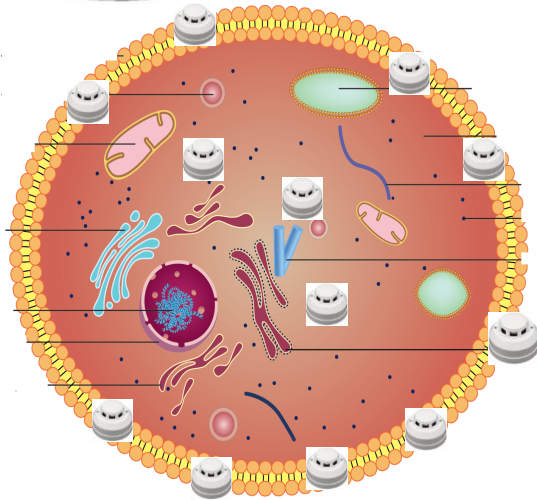
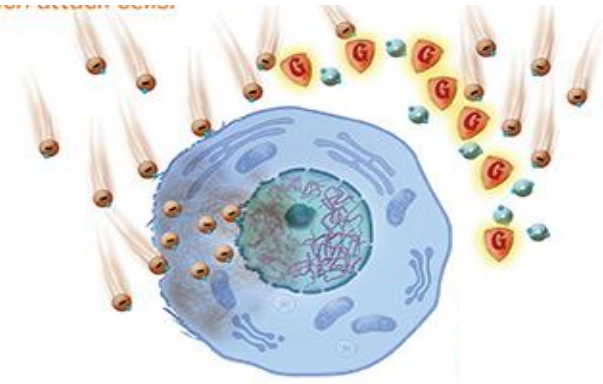
Ribosomes – the manufacturing organelles, scattered round the cell - make proteins





The SENSORS are the 'brain' of the cell

Detect incoming needs and creating the response.



Each cell has hundreds of sensors – we will look at just 4

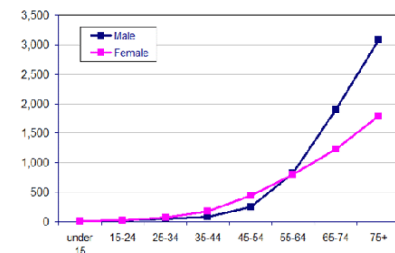
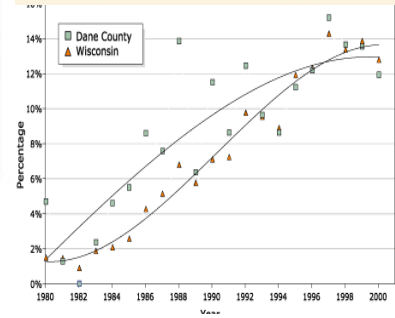
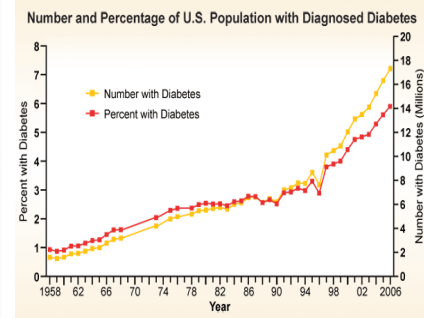
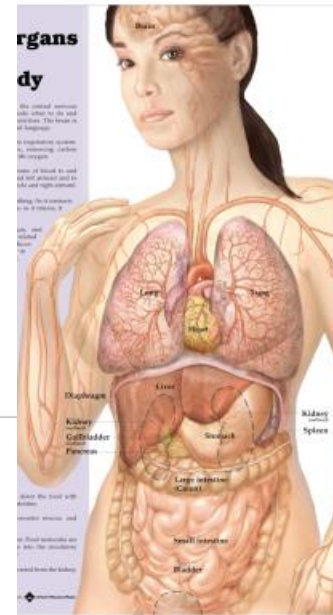
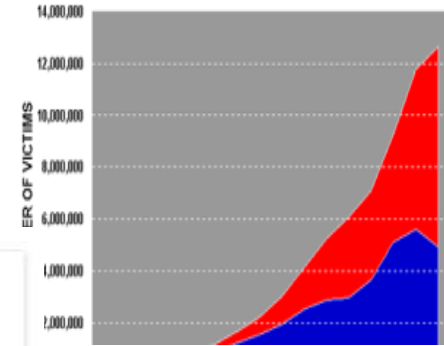
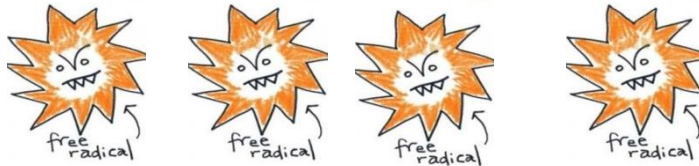
1. We are bombarded with **free radicals** –
2. Infections – **virus and bacteria**
3. **Plenty** of food and energy
4. **Famine.**

1. Free radical bombardment

Our bodies and cells are under constant attack by free radicals which create or aggravate diseases.



Free radicals (unstable harmful particles) damage everything they touch

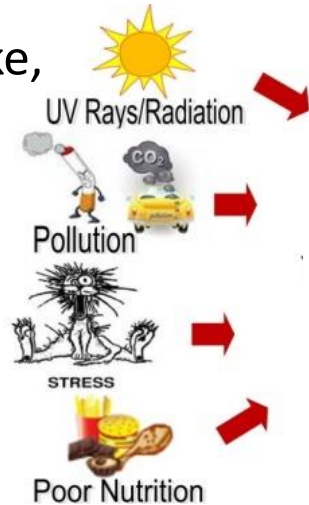




Free radicals are the major cause of today's diseases

CAUSES of FR

pollution,
alcohol,
tobacco smoke,
heavy metals,
transition
metals,
industrial
solvents,
pesticides,
certain drugs
radiation
EMF
phone towers



DISEASES CAUSED

macular
degeneration,
cardiovascular
disease,
cancers,
emphysema,
alcoholism,
Alzheimer's
disease,
Parkinson's
disease,
Ulcers
all inflammatory
diseases, such as
arthritis and lupus

We can neutralise **Free Radicals**
with **Antioxidants**



The logical answer to prevent and treat today's diseases is to neutralise the free radicals with antioxidants

Eat lots of fruit and vegetables



Scientists noted that in some areas these diseases were rare Often lived > 100 years



In these places – Sardinia, Akaria, Hunza, Okinawa



Live to old age active and healthy
Little or no cancer, heart disease, diabetes,

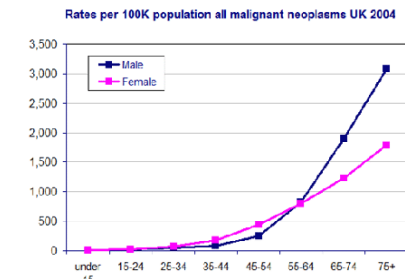
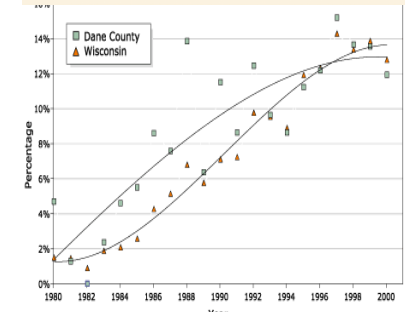
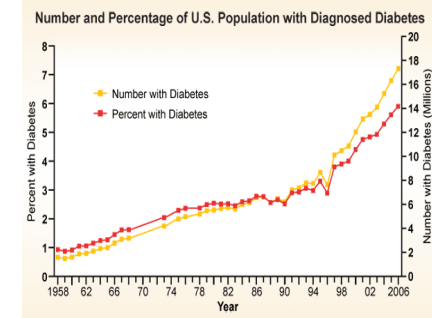
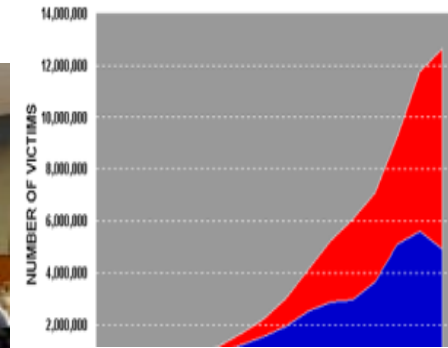
So we have been telling people
“ Eat lots of fruit and veges”

BUT:

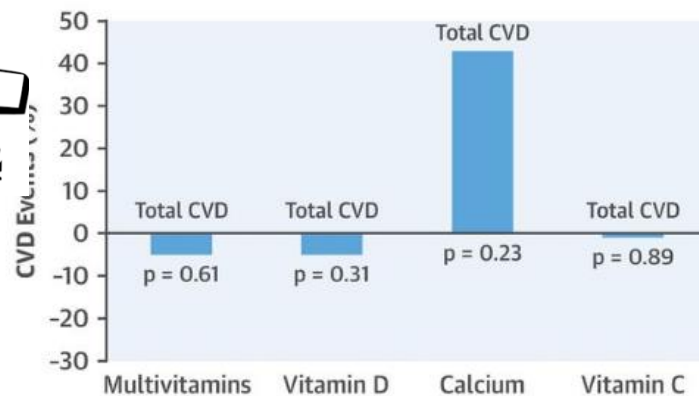
Its hard to do all year round
And still diseases climb
So – why not supplement
with the antioxidant
vitamins – A, C, D and E?



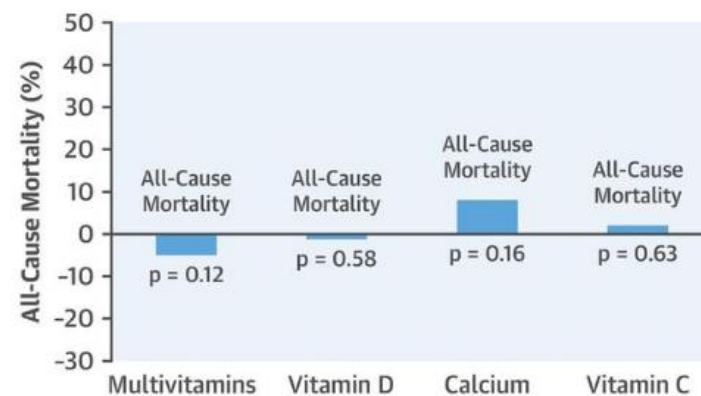
But it hasn't worked!



No trial has shown an increase in longevity from supplements
People feel and live better – but not longer



Heart disease events

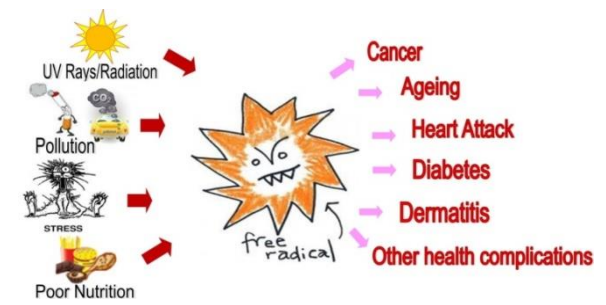


All cause deaths

All published trials Jan 2012 – Oct 2017
179 controlled trials, 18,000 in each arm
Supplements gave No harm and no benefit.

Jenkins, D.J.A. et al. J Am Coll Cardiol. 2018;71(22):2570-84.

So disease are caused by free radicals

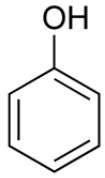


Eating or supplementing with antioxidants doesn't work.
We have been ignoring the elephant in the room



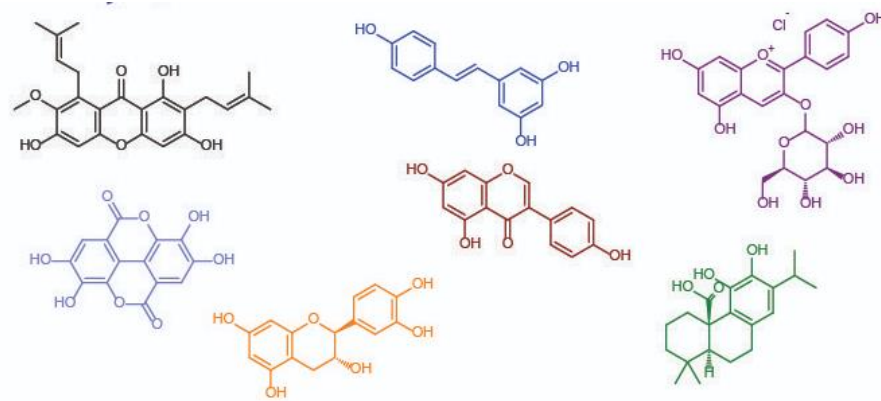
POLYPHENOLS!

Polyphenols



Phenol

Thousands of polyphenols



Give fruits, nuts & berries their colour, taste, bitterness
PROTECT plants from diseases



In our search for health, we have ignored them



What is special about – Sardinia, Akaria, Hunza, Okinawa



Live to old age active and healthy
Little cancer, heart disease, diabetes, cancer

Mediterranean –fruit & berries + red wine



Okinawa – purple sweet potato instead of rice

Hunza valley - milk, cereals, fruits and vegetables, apricots and juice

Rich in polyphenols all year round



Eating fruit and vegetables reduces some diseases

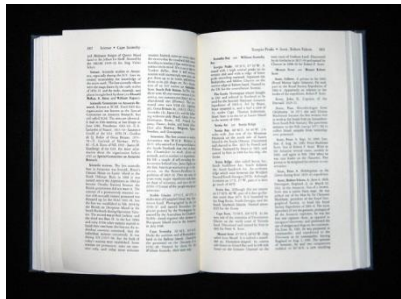
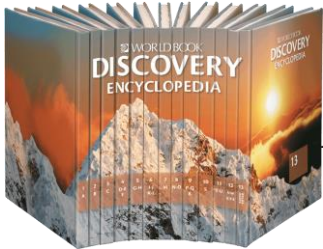
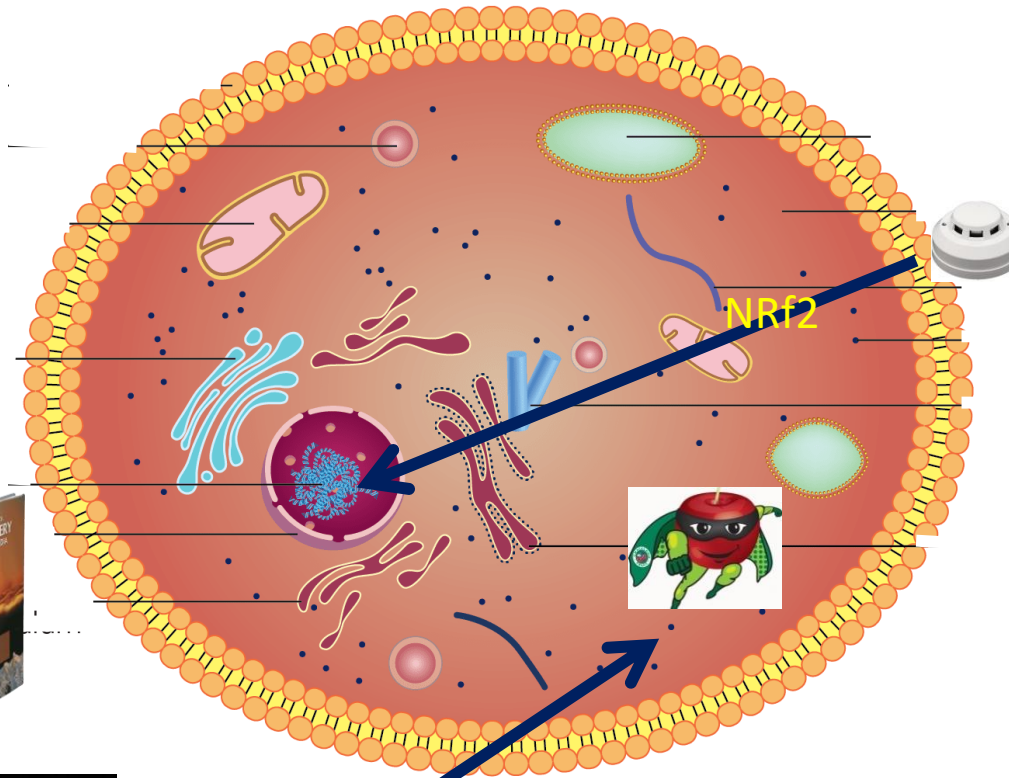


Why do polyphenols protect from these diseases almost completely?

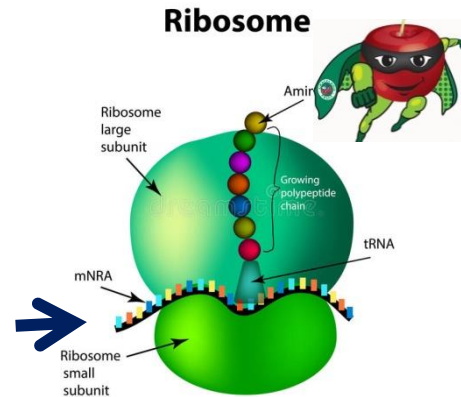




1. When a free radical approaches a cell



MRNA
Messenger RNA



Our protection from Free Radicals

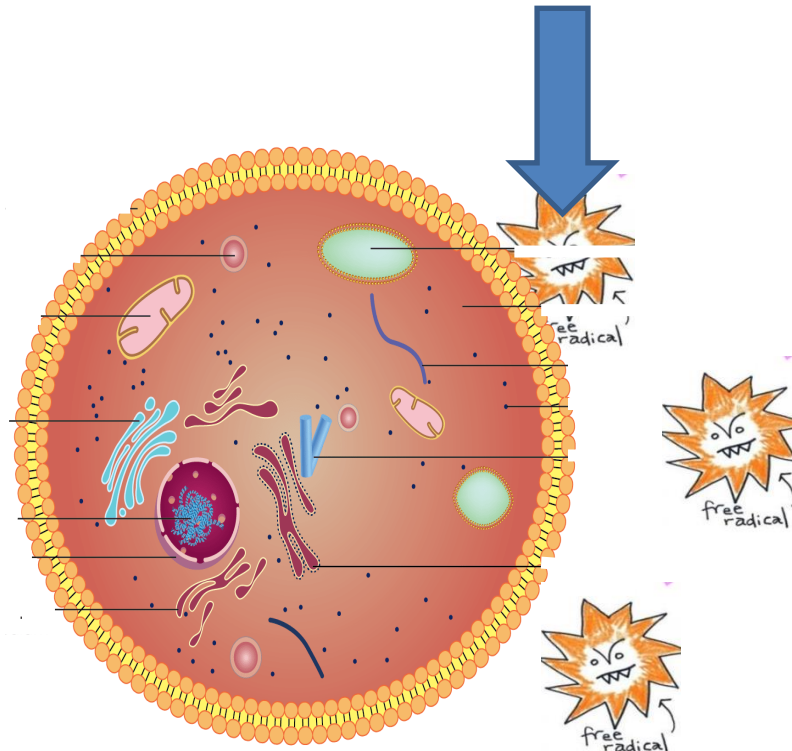
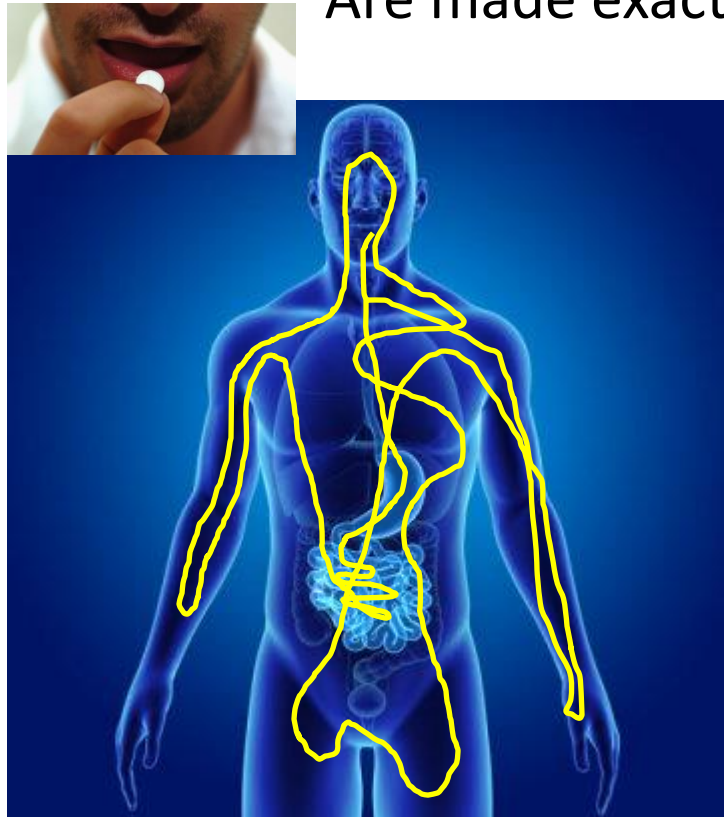
Antioxidant vitamins A, C, D, E - from diet and supplements



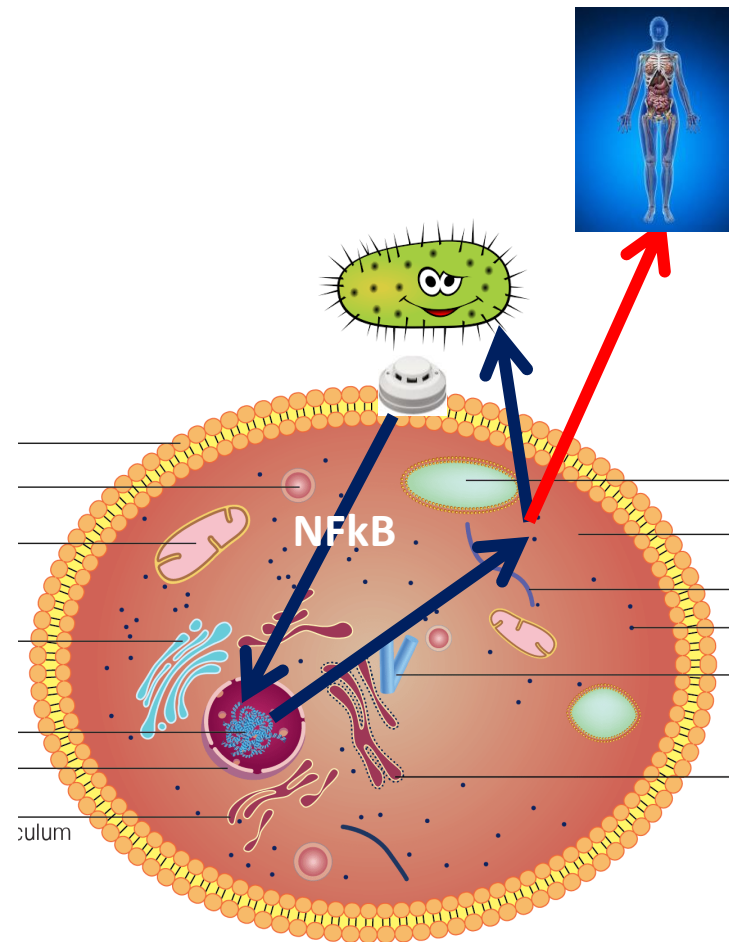
Cellular antioxidants – superoxide dismutase, catalase, glutathione reductase

These are 100 – 1000s more powerful

Are made exactly where and when they are needed



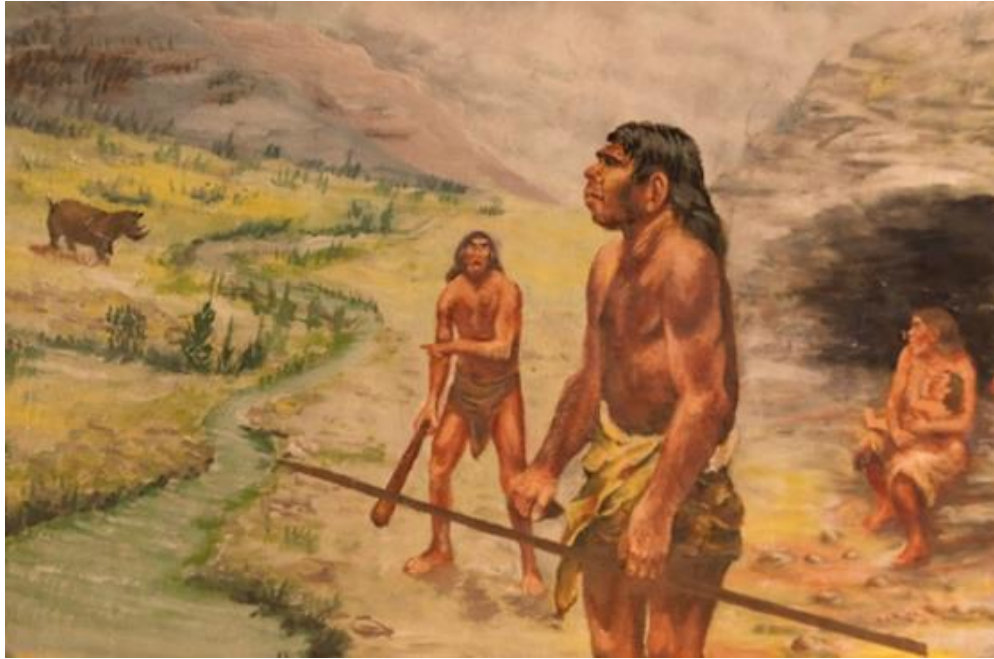
2. When a virus or bacteria approaches a cell



SLE
Crohn's
Ulcerative colitis
Rheumatoid arthritis
.....

The 'sensor' sends a message (NFkB) to the nucleus → anti bodies, complement and other defenses.
BUT the cell needs to switch these off, if not → autoimmune diseases

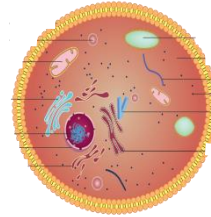
3 and 4 – sensors remaining from early man – response to feast and famine.



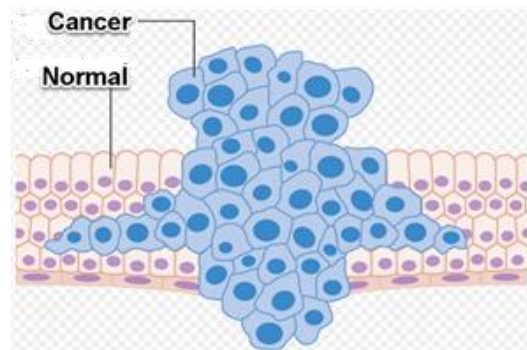
3. **FEAST** - sensors detect plenty and turn on **MTOR**



Prepare for famine – grow new cells,
mitochondria – stuffed with proteins
and fat



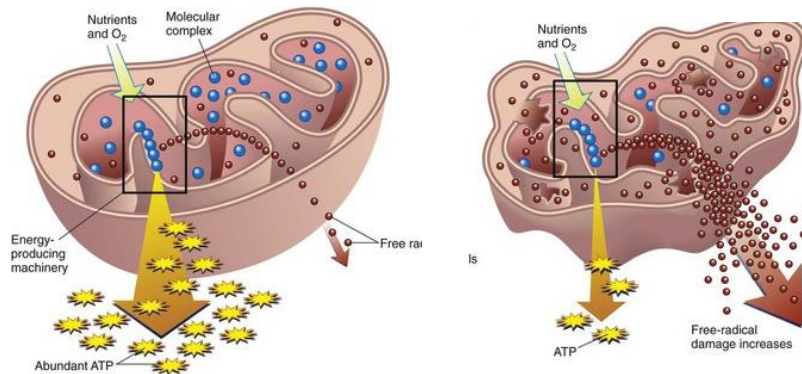
BUT today the ‘plenty’ never stops.
Multiplying, inefficient, stuffed cells can →
CANCER, HEART DISEASE, DIABETES...



4. Famine - switches on 'autophagy' –



- Cleaning out the debris from the cell
 - Replacing worn out inefficient organelles
- Young and old mitochondria



We don't have
famine –
Benefits of fasting



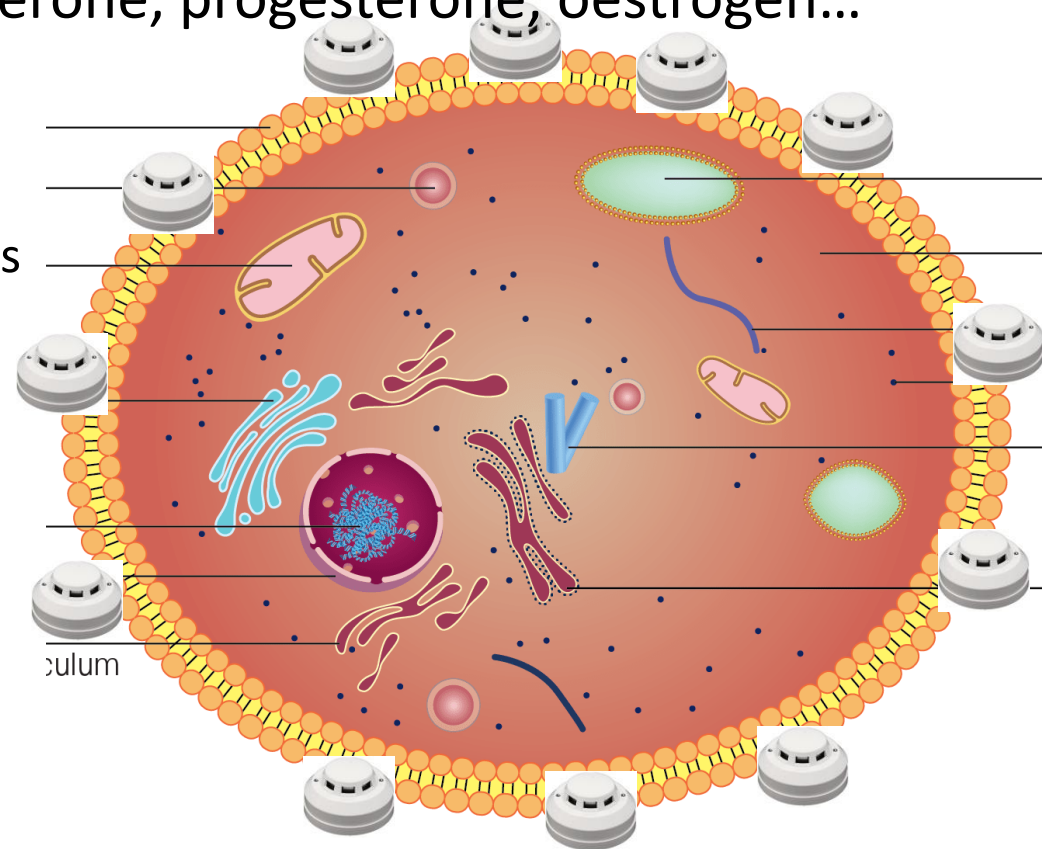
The cell has many hundreds of sensors for different things:

- Nrf2 (free radicals), NFkB (infections), MTOR, AUTOPHAGY
- Glucose → Insulin
- Stress → cortisol and/ or adrenaline
- Dehydration → vasopressin
- Low thyroid → thyroxine
- Hormone levels → testosterone, progesterone, oestrogen...
-

They can be switched on and off as required –

If not

THEY CAN CAUSE DISEASES



When the switches are working well → health



But the sensors can deteriorate –

- With age,
- Overwhelming signals,
- Continuous background ‘noise’– like Rotorua smell,
- Drugs
- Toxins
- Preservatives
- Poisons



How can we help our switches?



Polyphenols.

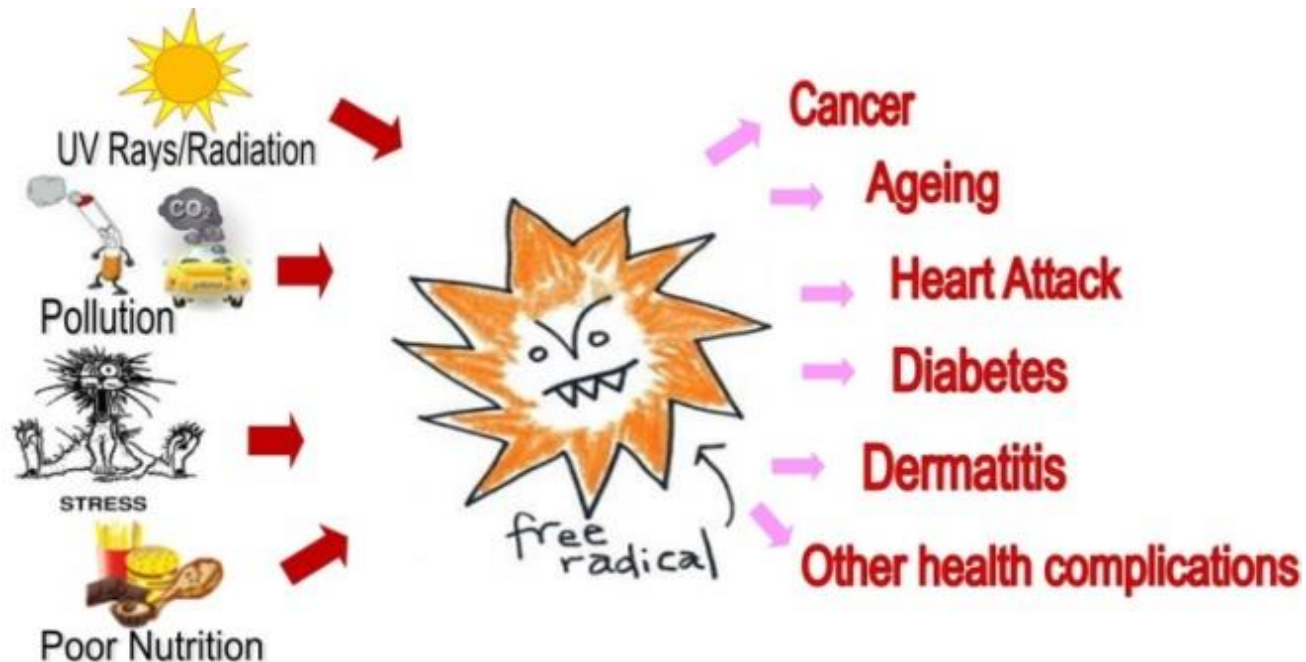
In tissue experiments -
Polyphenols
resensitise the cell sensors



Polyphenols:



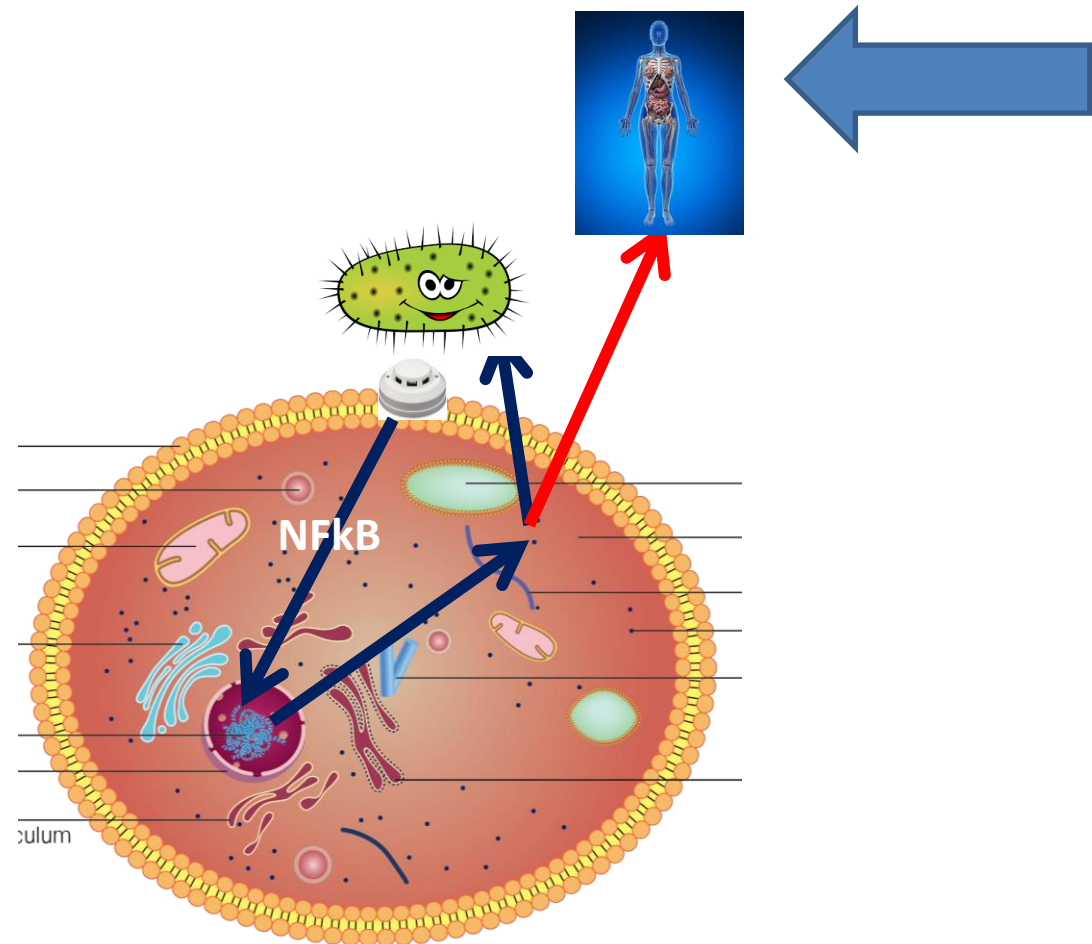
- Sensitise the **NRf2** sensors – reducing free radical damage
- May sensitise many other **NRf2** switches (diabetes...)



Polyphenols:



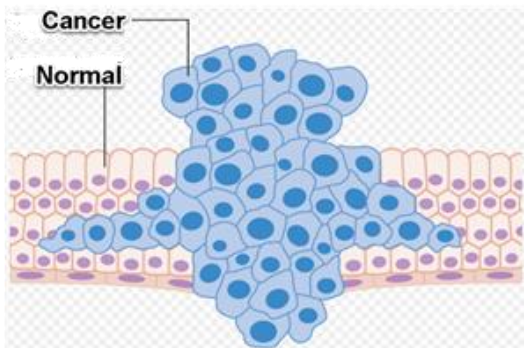
- Sensitise the **NRf2** sensors – reducing free radical damage
- May sensitise many other **NRf2** switches (diabetes...)
- Help turn off the immune response to **NFkB** – immune diseases



Polyphenols:



- Sensitise the **NRf2** sensors – reducing free radical damage
- May sensitise many other **NRf2** switches (diabetes...)
- Help turn off the immune response to **NFkB** – immune diseases
- Helps turn off **mTOR** when not needed



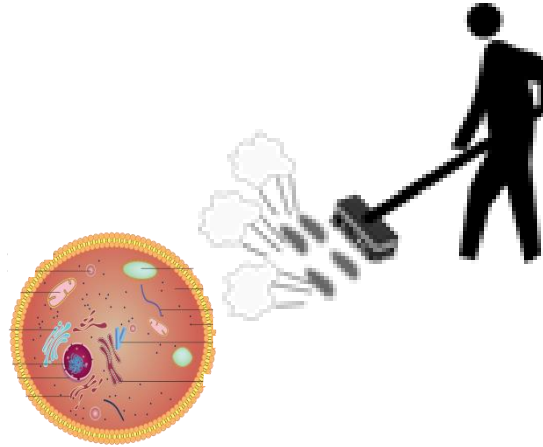
Cancer, diabetes, heart disease



Polyphenols:



- Sensitise the **NRf2** sensors – reducing free radical damage
- May sensitise many other **NRf2** switches (diabetes...)
- Help turn off the immune response to **NFkB** – immune diseases
- Helps turn off **mTOR** when not needed
- Encourage **Autophagy** – clean, efficient healthy cells



**Efficient perfect
functioning cells**

Polyphenols:



- Sensitise the **NRf2** sensors – reducing free radical damage
- May sensitise many other **NRf2** switches (diabetes...)
- Help turn off the immune response to **NFkB** – immune diseases
- Helps turn off **mTOR** when not needed
- Encourage **Autophagy** – clean, efficient healthy cells

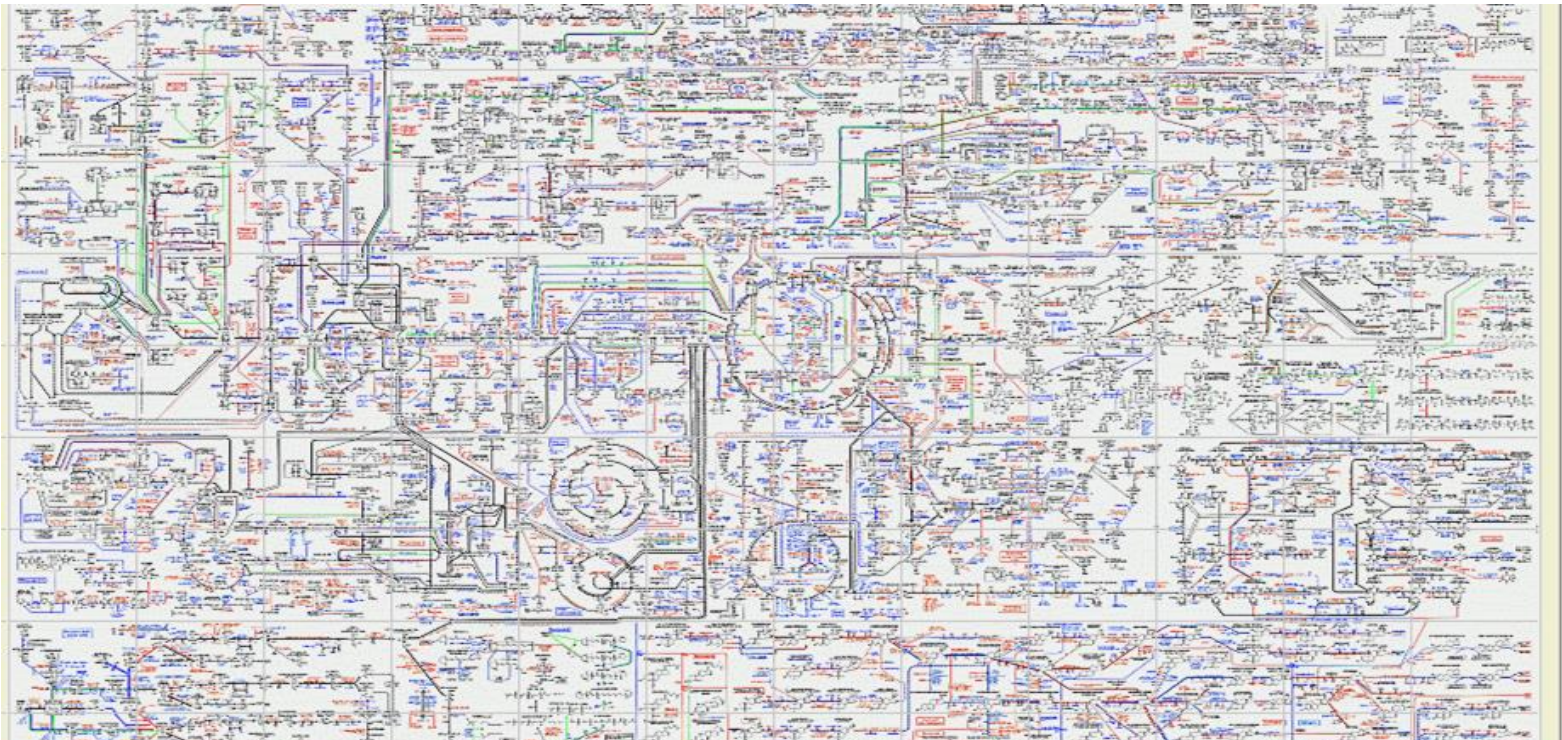
All of these

1. Protect the body from toxins, radicals and infections
2. Reduce the risk of diseases – both protection and healthy cells
3. May help in treating and recovery from diseases
4. Helps the body function and perform more efficiently



What our bodies are designed to receive in optimal situations

The ideal diet



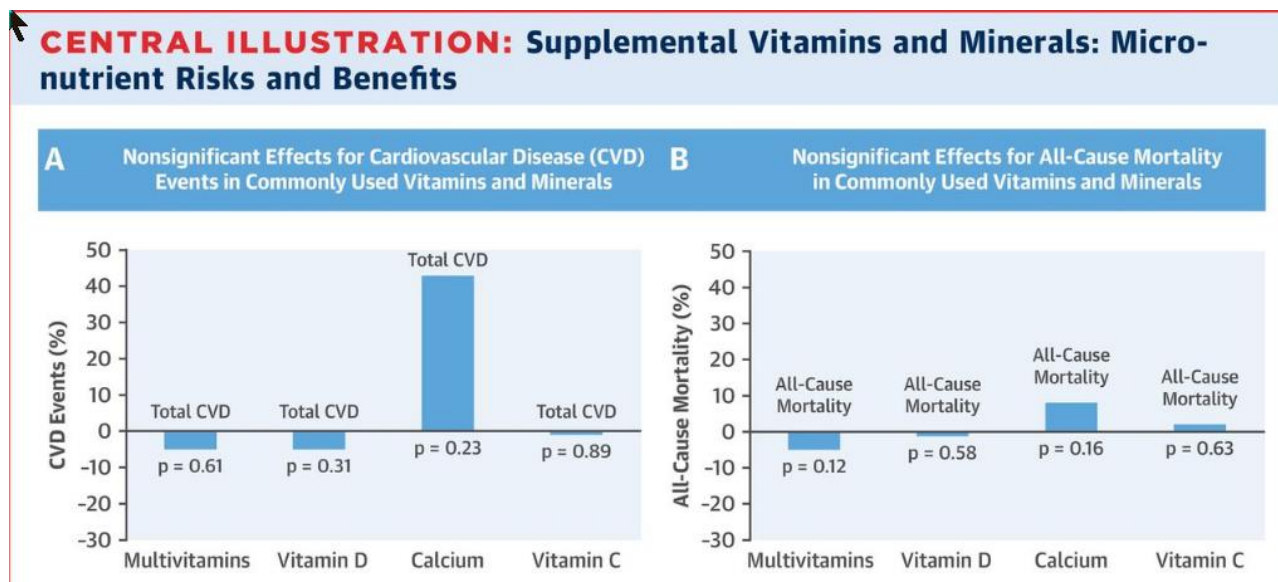
All the vitamins and minerals to allow all the chemical reactions to work.



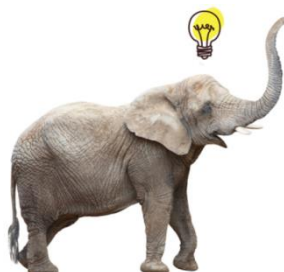
But the usual diet almost never is complete –
Add:

1. A good comprehensive multivitamin/mineral
2. Omega 3 fish oils

But that has not been shown to reduce diseases



3. Add polyphenols



It's almost impossible to get enough polyphenols all year round



So take a supplement which contains them

But none do with one exception:



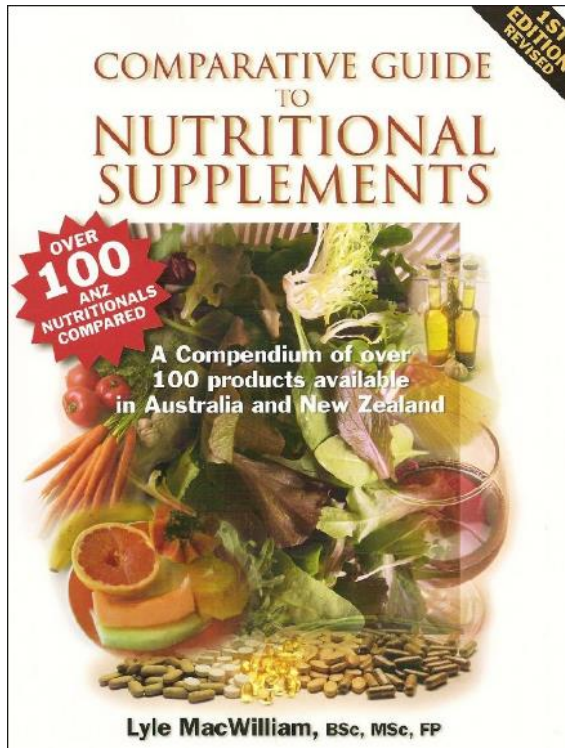
The USANA Cellsentials

Still No 1 in the
McWilliam
Comparative Guide



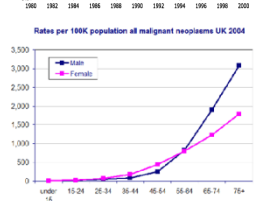
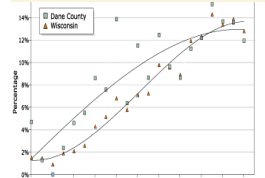
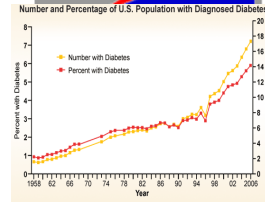
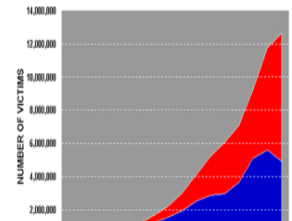
Plus 8 new active polyphenols:

- Resveratrol
- Quercetin
- Hesperidin
- Ruthin
- Alpha lipoic acid
- Green tea extract
- Mareva Turmeric
- Olivol



How we can help prevent and treat today's diseases

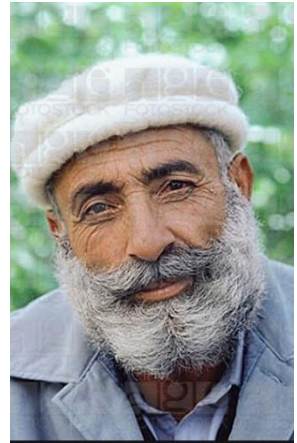
- Positive mental attitude
- Regular exercise
- Good diet
- Take a top quality supplement containing polyphenols all through life



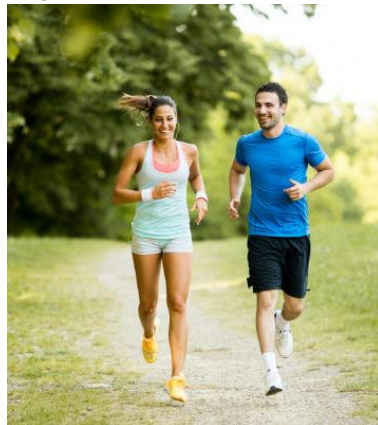
If we all did this:

If we all did this:

Living to over 100 would be common place

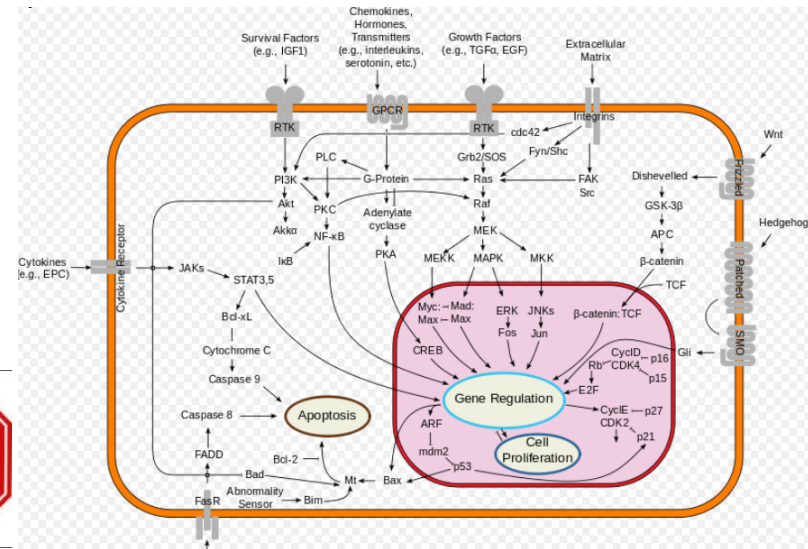


We would be healthy and active throughout life



We would be able to TREAT most of today's diseases much more easily and effectively

Cell signalling is very complicated
 We don't need to understand it
 Polyphenols do all the right things



Now we have the answer to true
 long term health and wellness.

www.drgeraldlewis.com

Talks