

AMERICAN BIOLOGICS

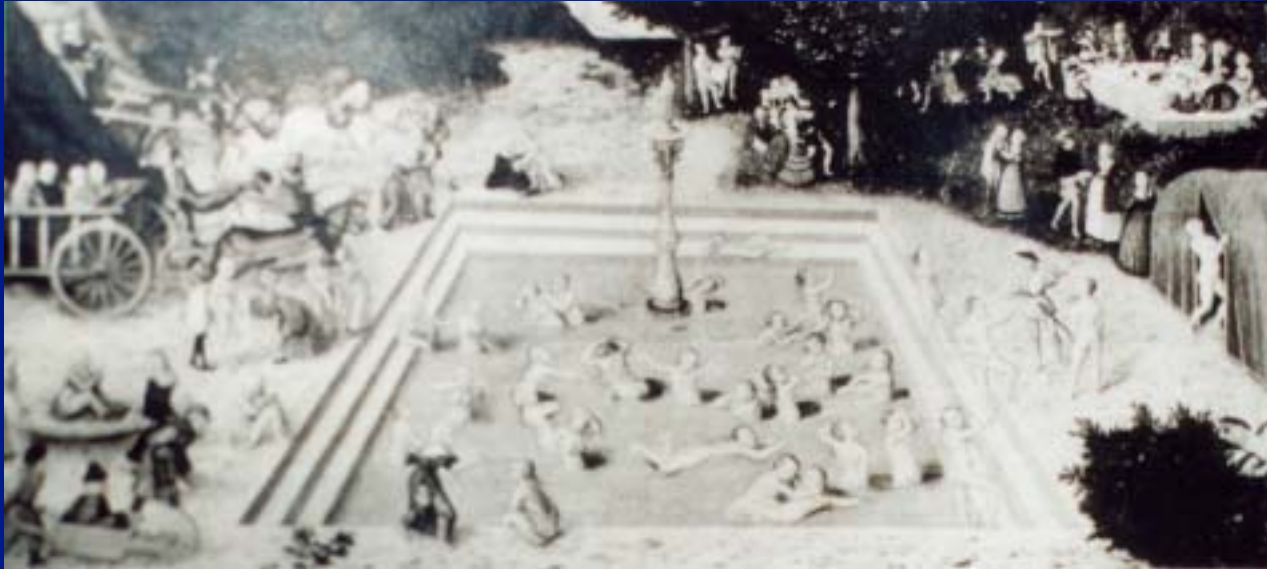
13th International Symposium
“Integrative Medicine 2001”
Malta

Mitochondria DNA mutations
in Aging and ARC's diseases
Iridology profile

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Aging is one of the greatest challenges to men, which has always been looking for rejuvenation and for the youth fountain.



However aging is a normal process of human species with cumulative process of damaged body constituents, brain dysfunction with loss of brain cells, neurons communication which slowly affect learning and memory function.

Brain neurons system

Contains over 100 Billions nerve cells or neurons

Specialized to transmit impulses from one part of the body or CNS to another.

- Interpretative functions involved in thinking, learning, memory, etc.

Brain cells do not repeat cell division

At 35 years of age each individual lose about 100000 neurons *per* day.

- In each decade over 45 years, we lost about 13% of dopamine producing neurons (P.D. 80%).

The quality of food, good bowel function, clean blood is the most important, as nerve fibers are supplies in nutrients by blood vessels.

Bad bowel function
(toxins)



Radii solaris
(transverse colon)



Affect brain
function

The living machines, we call our bodies, deteriorate because they were no designed for extended operation and because we now push them to function long past their warranty period.



1st Observation

Physical and psychological deterioration may appear not only different from one person to another, at the same age, but also before the chronological age and visible amount of middle age, and younger persons with related symptoms.

- Genetic events.
- Hereditary factors.
- High fat intake (High caloric foods).
- Fried foods.
- Low antioxidants status.
- Decline of SOD induction.

Based on my clinical observation, these are some of the subjective factors that accelerate biological aging.

Age – Associated memory impairment AAMI

It was initially used to describe minor memory difficulties that were believed to accompany the aging process.

This impairment is now known to exist in patients aged as young as 50 years.

Coming from my clinical experience AAMI appear not only as young as 50 but as young as 40 and even 30 years.

Long-term studies reveal that
AAMI may progress to AD

Neuroscientists now agree that memory loss is a disease that attack the brain 30 to 40 years before symptoms appear.

Advances – Chicago III – Alzheimer's
Association – Spring 1998.18(1)

One of the deteriorative negative effects is attributed to a high fat diet , which in fact may be observed in the iris.

Including:

- Build up of atherosclerotic plaques
- Vascular disease
- Coronary artery disease
- Cerebral vascular disease
- Abnormal clothing perimeters; and free radical direct destruction of neurons.

(Those effects can be also checked through peripheral blood analysis).

Kaljmijins, Feskens, E.J.Launer L.J.
et al,

(Polyunsaturated fatty acids, antioxidants and cognitive function in very old men).

Am.Epidemiol – 1997.124.33.41

Aging, free radical and mitochondria DNA mutation

It is obvious that mitochondria and ATP production is the precondition for human health, and nutritional status play a major role in the number and the quality of mitochondria.

There are many lines of research showing that a wide spectrum of diseases and aging is thought to be caused by free radical reactions in mitochondria which accumulate to age, producing MTDNA mutations because of SOD decline.

“Intervention in the Aging process by targeted expression of SOD and other antioxidants enzymes in critical cell types.”

J.P.Philipps – Dept of Molecular Biology and Genetic – University of Guelph

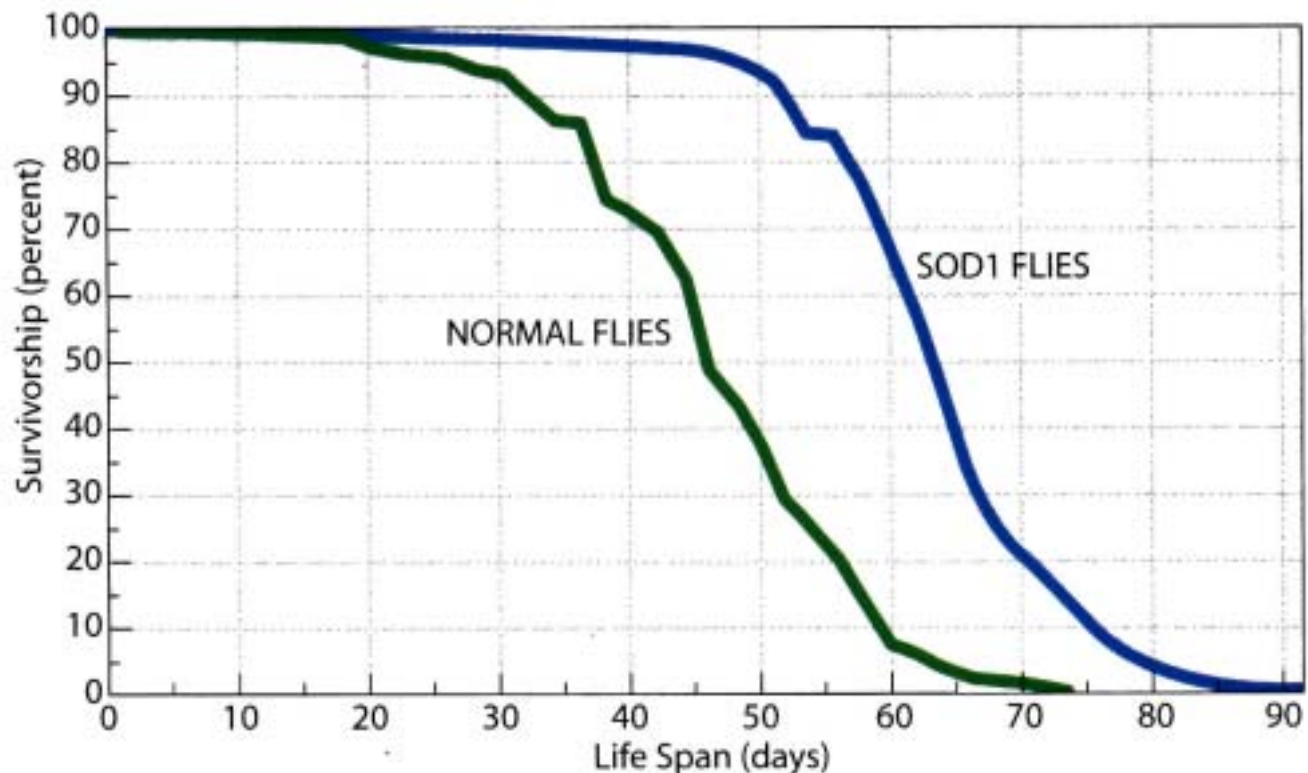
Guelph – Canada

2nd International Seminar on SOD.2000

Institute Pasteur – May.2000-Paris

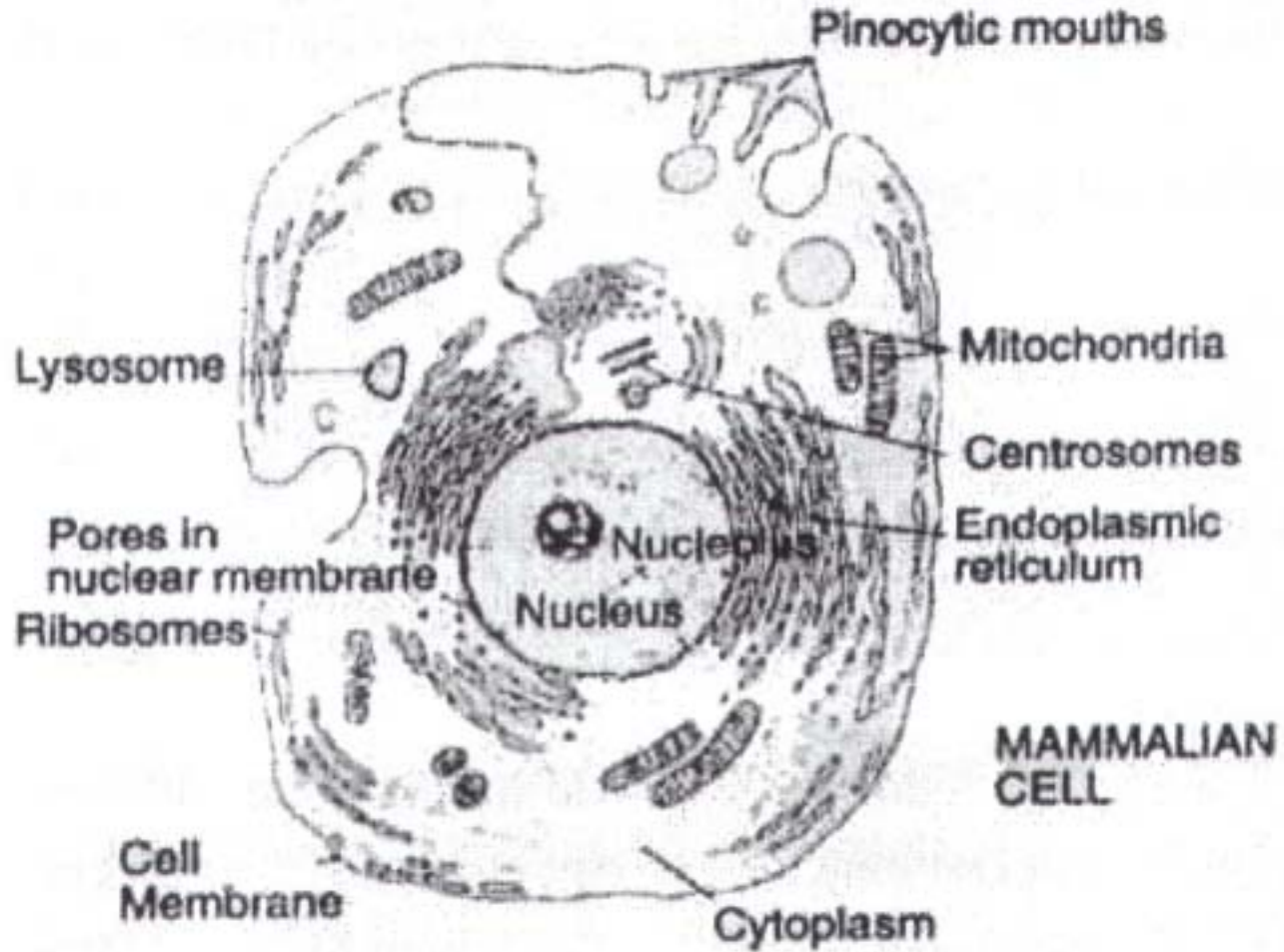
rust inhibition:

an enzyme extends life



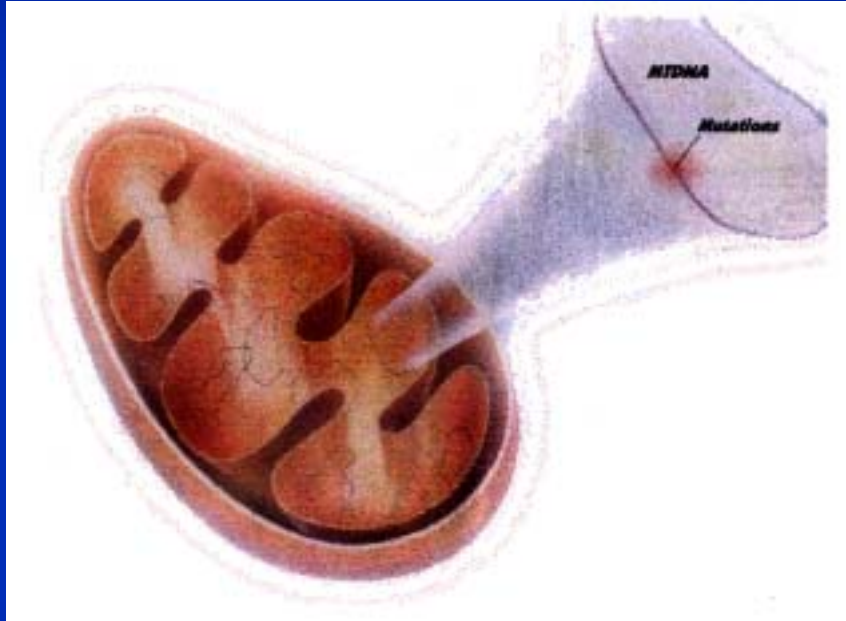
LONGER YOUTH: Fruit flies bred with a dose of SOD1, an antioxidant enzyme that breaks down free radicals, lived 40 percent longer than normal fruit flies did in a University of Guelph laboratory. Notably, the phase of life extended was youth, not old age.

Mitochondrial DNA Mutations and the Aging Process



Accumulation of free radicals accelerates the oxidation of mitochondria components such protein, lipid and DNA components.

It also induces DNA mutation that affects mitochondria protein involved in Oxphos.



Accumulated mutations depresses ATP production, producing more free radicals and inducing more mutations.

This pushes faster energy output below desirable level. It means that symptoms appear early, with dysfunction which progress quickly to full disease.

Mitochondria DNA mutations

MT DNA mutation → Disrupt RNA molecules. Affect proteins.-

Depress ATP production → Increase free radical activity → More mutations

Respiratory chain
oxphos fail

Somatic mutations

Energy decrease.
Somatic mutations
accumulated

Reduction activity
Complex I, III, V

ATP decrease. Energy
output below desirable
levels more quickly

Activity of the brain, heart, muscles, kidney,
hormones, producing tissue progressively decrease.

Mitochondrial dysfunction can create

Weakness

Fatigue

Neuropathies

Cardiac problems

Ocular problems

Kidney problems

Liver problems

Pancreatic problems

Colon dysfunctions

Central nervous system problems

Profiling aging through iridology

Iridology is a preventive check up and from iris study I made clear position to determinate the degeneration of the C.N.S. (brain neurons) and other body's dysfunction.

Therefore iridology has significant advantage to observe:

- Constitutional weakness and what can be determined in advance, allowing preventive care, dietary restriction and supplementation against biological aging.

Mitochondria DNA somatic mutations can be inherited (from the female to the new offspring) or can be acquired in tissue throughout life with different mutations potentially occurring in different cells or even different DNA molecules in a single cell.

Individuals inherited oxphos genotypes define the initial energetic capabilities and potential functioning of tissue and organs.

Therefore through iridology defines:

- constitutional strength - (IFD)
- autonomic nervous system - (ANS)
- central nervous system - (CNS)

or any inherited organs or tissue weakness.

how we age

EARS: Ability to hear high-frequency tones may decrease in 20s; low frequencies in 60s; between ages 30 and 80, men lose hearing more than twice as quickly as women.

BLOOD VESSELS: Arterial walls thicker; systolic blood pressure rises 20 to 25 percent between ages 20 and 75.

BONES: Bone mineral loss begins to outstrip replacement around age 35; loss speeds up in women at menopause.

MUSCLES: Muscle mass declines; oxygen consumption during exercise decreases 5 to 10 percent per decade; hand grip strength falls by 45 percent by age 75.

BRAIN: Memory and reaction time may begin to decline around age 70.

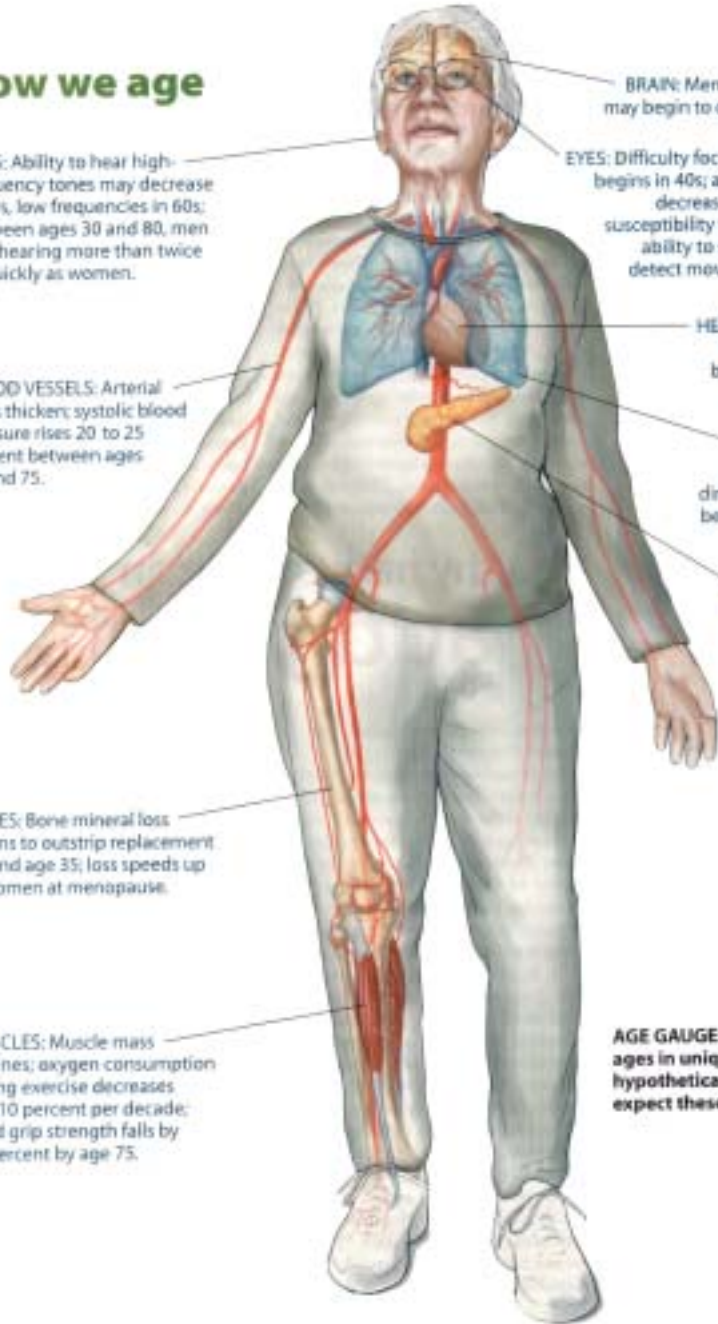
EYES: Difficulty focusing on close objects begins in 40s; ability to see fine detail decreases in 70s; from age 50, susceptibility to glare increases, and ability to see in dim light and to detect moving targets decreases.

HEART: Heart rate during maximal exercise falls by 25 percent between ages 20 and 75.

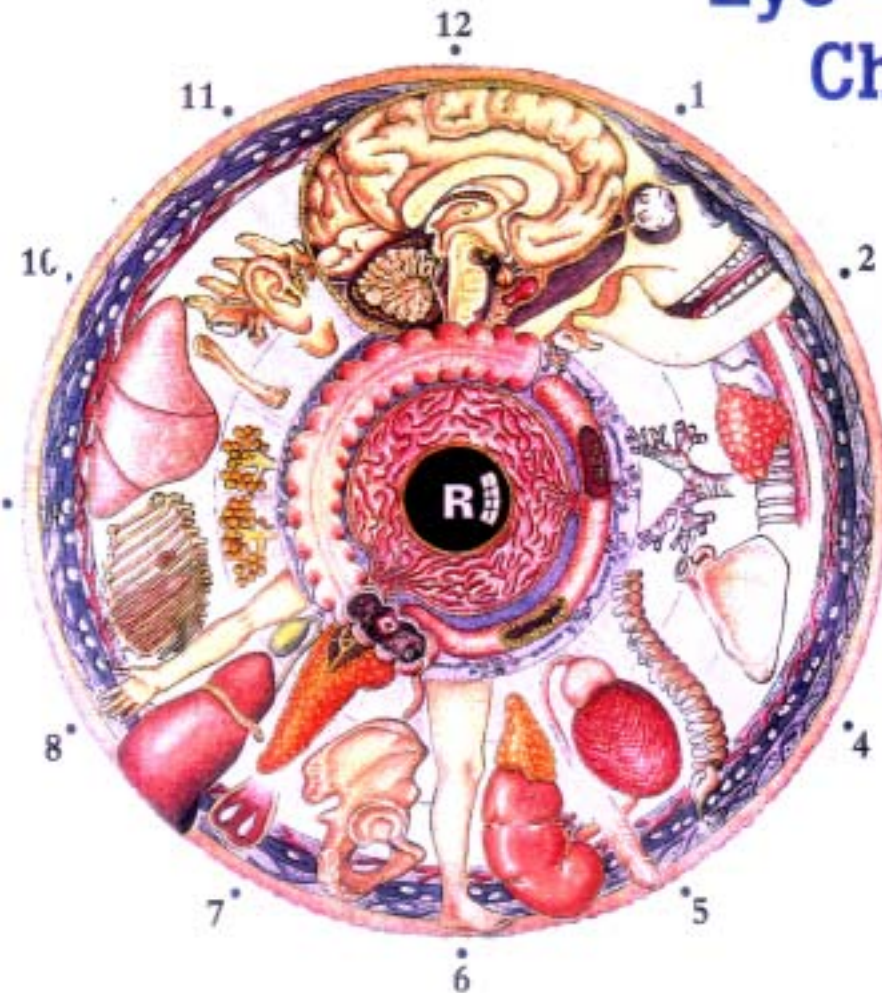
LUNGS: Maximum breathing capacity diminishes by 40 percent between ages 20 and 80.

PANCREAS: Glucose metabolism declines progressively.

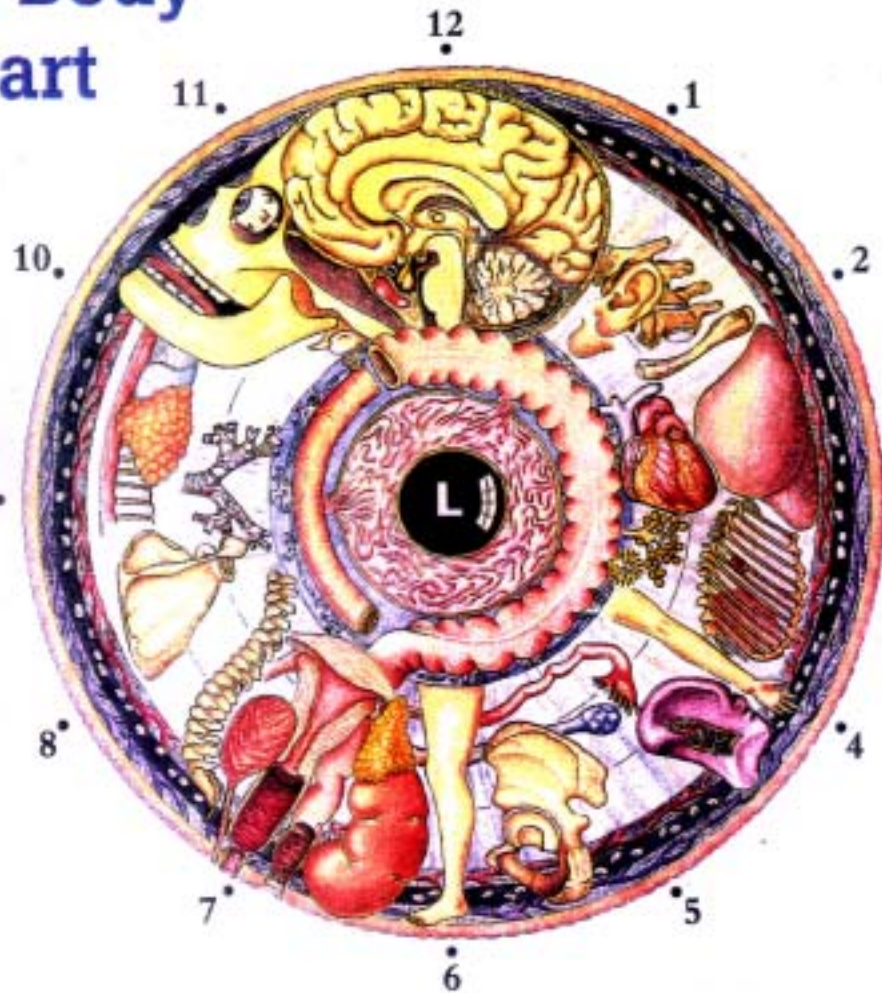
AGE GAUGE: Each person's body ages in unique ways, but a hypothetical average person can expect these changes over time.



Eye - Body Chart



RIGHT IRIS
(MALE)



LEFT IRIS
(FEMALE)

"The iris is an extension of the brain and is a visual display of all that happens within the body"

Iridology profile of aging factors.

- Deterioration of the CNS (brain neurons).
- Bad bowel.
- Dark nerve ring (chronic stress – adrenal gland release cortisol inhibitory effect on memory – inhibit delivery of glucose molecules to mitochondria – free radical – dendrites atrophy.)
- Deterioration of the ANW.
- Poor brain circulation (low oxygen).
- High lipid level around the iris periphery or in the sclera.
- Sodium/lipid ring peripheral or accentuated at the brain area.
- Radii Solaris into brain area.
- Toxins accumulation.

Study with 250 female patients aged between 40 and 50 years (1997).

Although since this study, new cases of younger people were included in this figure.

Methods: Iridology observation
Peripheral blood analysis
Vega DFM 722

Partial lost of memory	100%
Amnesia	50%
Insomnia	80%
Anxiety/Sadness	70%

Lost of sense	40%
Vertigo	70%
Nerve dysfunction	100%
Chronic constipation	80%
Stress (nerve ring)	70%

Low brain energy level

Peripheral blood analysis

They exhibit:

- accumulation of lipid peroxide.
- damaged RBC's and oxidative stress.
- poor nutrients status.
- high toxins level.
- atherosclerotic plaques.

Vega 722 DFM computerize.

Energy analysis.

Energy level very low at the brain sector and some reflex-key-organs such the GUT show low function.

Biological aging patients divided in 2 categories

A – Those who show no sign of physical age deterioration but only in the iris.

B – Those who, for the past several years, had symptoms of aging with morphological change which have made them appear from 10 to 20 years older as they actually are.

In the category A, we often see no significant visible physical change but we can observe many dysfunctions mainly the CNS, high lipid level and bowel dysfunction.

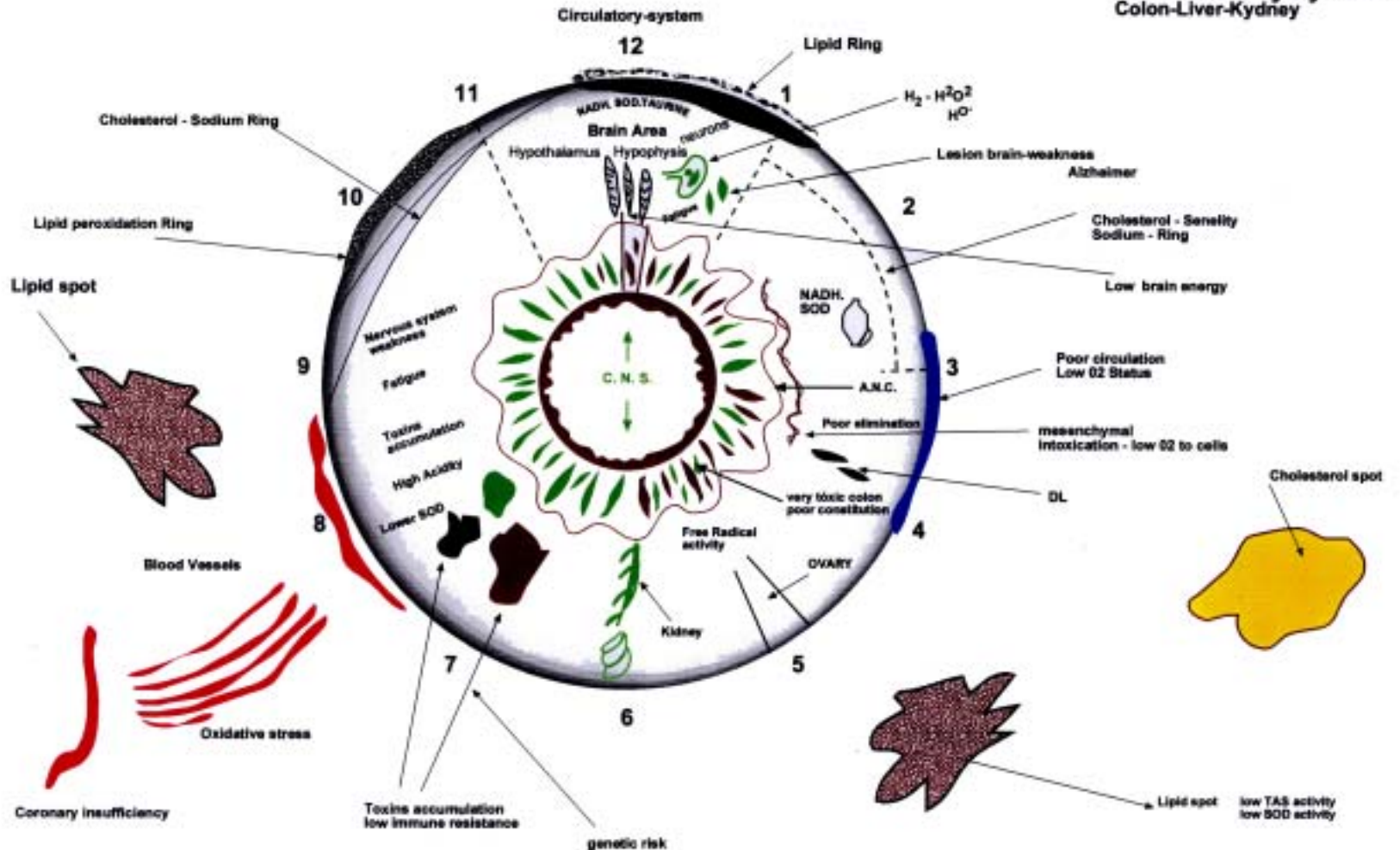
They will start aging at a fast pace

Quick aging deterioration in a 42 years old patient



PROFILING AGING THROUGH IRIDOLOGY

Poor detoxify system
Colon-Liver-Kydney



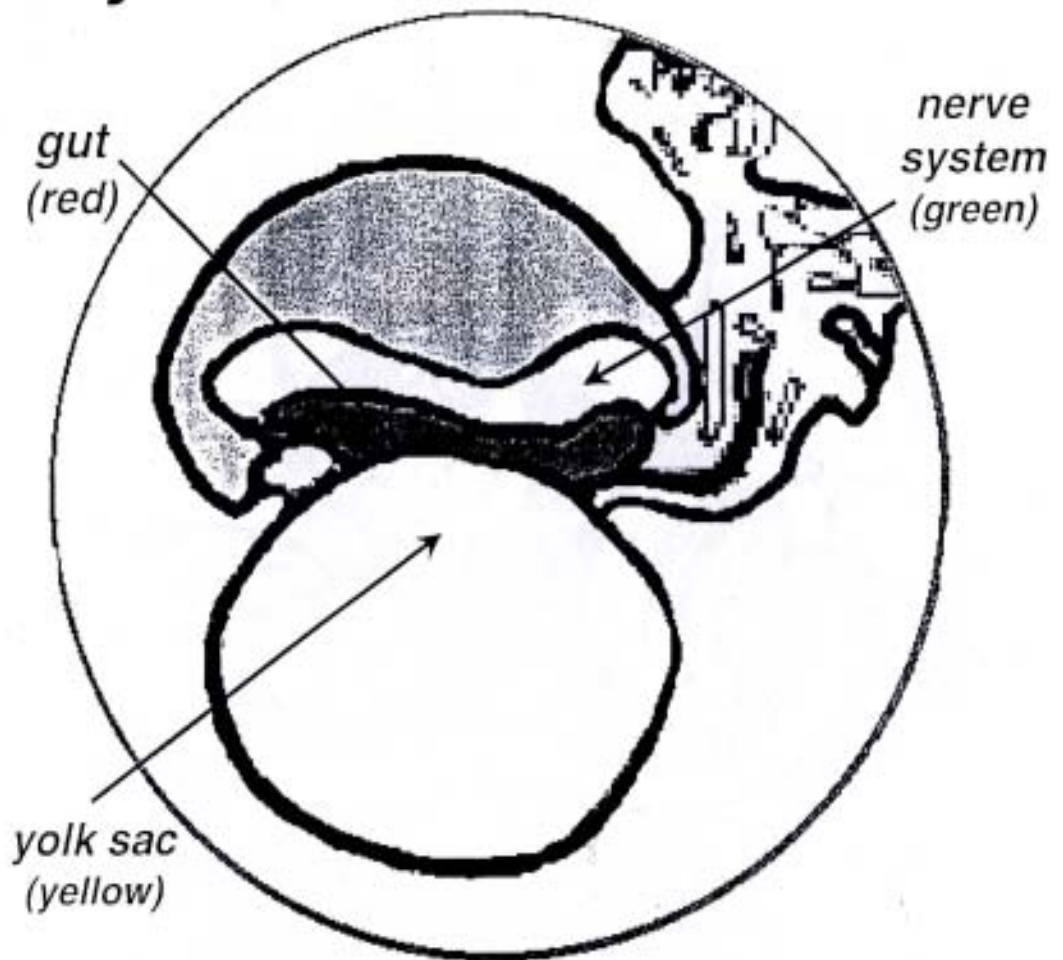
The 2-week embryo

The developing body takes form in the embryo stage.

The yolk provides the nutrients to create the heart, liver, brain and all other parts.

The gut is a tube. Behind it is the neural tube from which the nervous system will develop.

This provides the main structure of the iris layout, the digestive system in the middle, surrounded by the nervous system. Outside this is the rest of the body.



- In the 2-week embryo:**
- ◆ The gut passes nutrients from the yolk to form the body
 - ◆ It is an almost featureless tube
 - ◆ The nerve system lies behind the gut

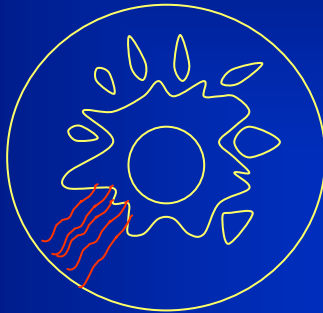
Aging Process in the same family

Iris: Blue
Density - 4

Father: Age 50 years
Biological age 60 years (Arc's)

High Fat Diet

High
oxidation



Bad constitution
Poor nervous
system

Physically aged

Lipid ring

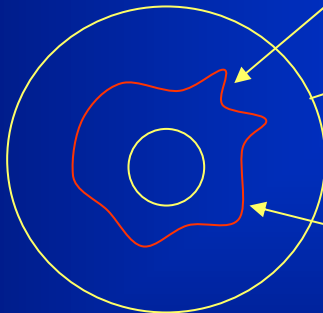
Son: 15 years:
Biological age: 25 up
Iris: brown-left.

Nerve and
Intestinal
dysfunction

Mother: 43 years

Inflammation

Iris: brown
Density - 3



Hypomitochondrisis
- earlier aging

A.N.W.

Very toxic tissue.

Poor circulation
Low O2

Accumulation
Lipofucine
Brain neurons.

Poor constitutional
Strength.

Poor C.N.S.

Poor A.N.S.

Poor GUT System

Poor brain Function

Memory concentration

Difficulty to study

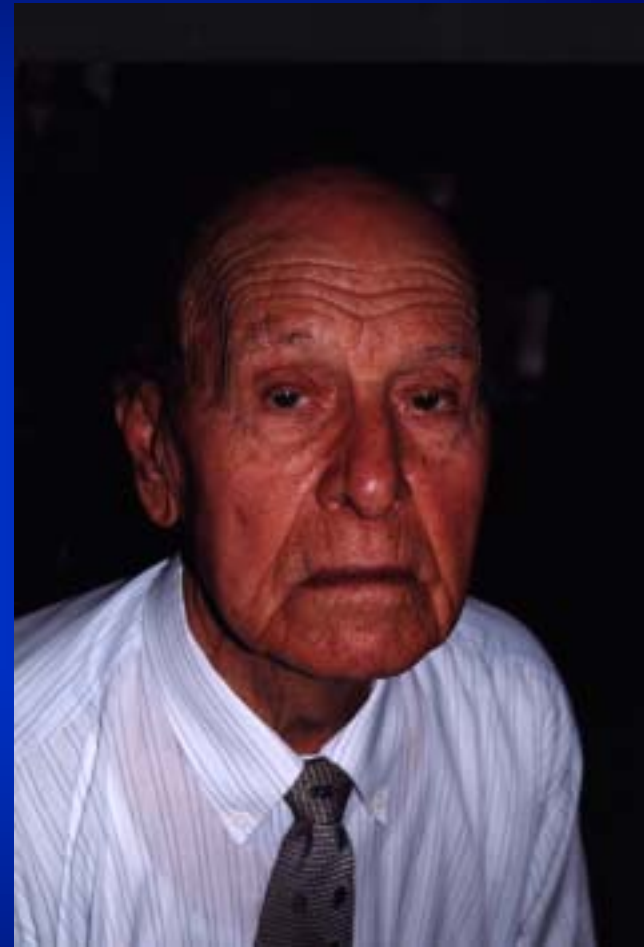
Lack of interest

Nerve and intestinal
dysfunction - constipation

High
Oxidation

Physical changes associated with aging in humans

- Dried skin with spots and more wrinkles.
- Pleat skins are more important.
- Wrinkles appear particularly around the mouth.
- Ring/bags around and under the eyes are more accentuated.
- Face muscles are flat.
- Loss of muscle masses and flat abdomen.
- Loss of hair, grey and white hair.
- Poor circulation with sensation of heaviness in legs, veins and capillaries are more apparent.
- Vision impairment, hearing affected more pronounced in men



73 years old

F. 59 years

Very poor health status.
Physically aged. Brain
dysfunction, poor memory
and concentration. Lost of
interest, very bad circulation.

Iris shown

Sodium/cholesterol ring on
the brain area.

Beginning of Alzheimer's
disease.



M. 40 years
Biological age 55 years

Bad dietary habits: High meat and fat intake



Blue Iris : Good Constitution

Moderate oxidative stress.

Good nerve constitution.

Good tissue.

Slightly overacid.

Good detoxify ability, specially from the bowel

Moderate food style



Fair constitution – disturbed ANW – intestinal disorders – bad digestion but good brain status – no sodium/cholesterol ring, no lipid ring at the brain area.

She is my patient for the past 28 years taking regularly enzymes yeast cells, supplementation and good diet. She is still active working in her farm.



Patient F – age: 83 years

Case 6090 - Iris: Fair constitution

F- 73 years - Small pupil: nervous tension
– Field worker and much exposed to sun –
Dried skin with too much wrinkles and
spots – white hair.



Sodium/Cholesterol ring
visible - she starts to feel
fatigue and loss her sense and
memory. Eat pork meat,
sausages all her life.

Sodium / Cholesterol ring (Aging ring)

Atherosclerotic plaques
can appear in the iris in middle
age persons in accordance with their
dietary habits – High fat intake – Fried foods

Born



non-existent

25 – 40 – 50 years

Slowly appear in the iris

Including lipid ring

Very dense sodium/cholesterol ring premature for her age and it may be a factor of Alzheimer's disease.

There is A.D. in her family. She eats wrong food and high fat intake. About 25-30 years ago this ring was not visible in young persons.



F. 26 years old

Brown Iris

Example of dysfunction of the CNS (brain neurons) indicating aging and related changes (Arc's).

Deep brown ring inside the pupil indicating neurons damage/probably lessen brain cells and lost brain communication. High oxidation and free radical activity.



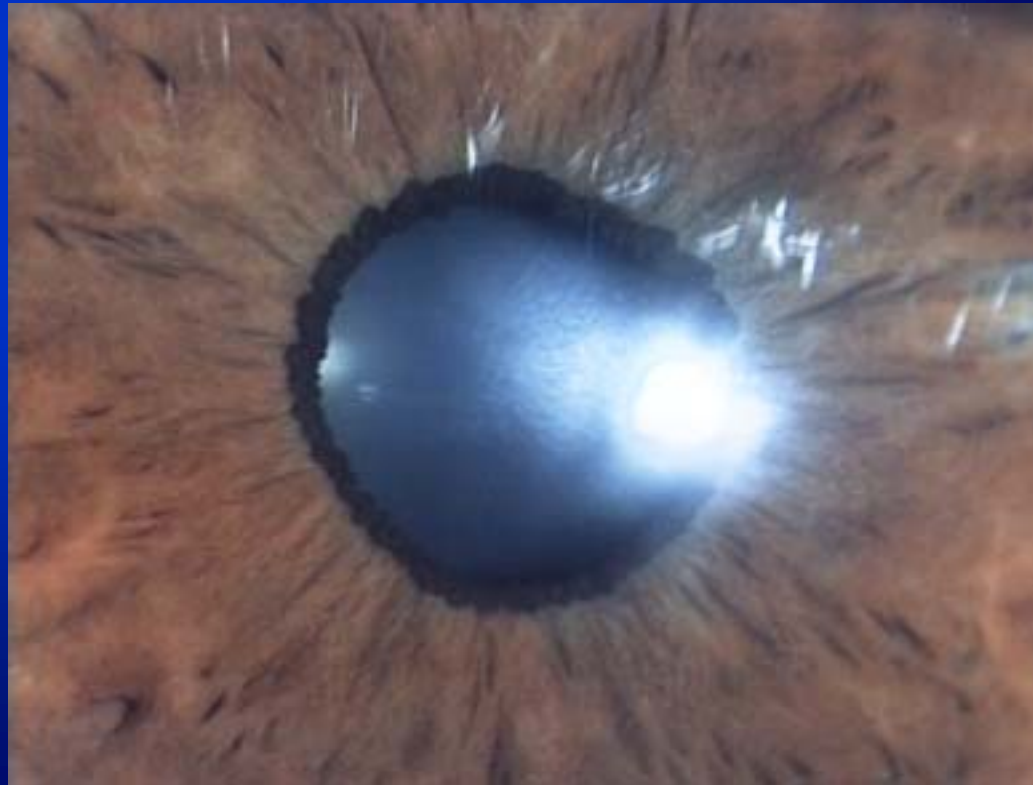
Typical case of damage of the CNS as we can see around the pupil.

Feel very weak, with permanently fatigue, also in the legs with no reasons. Suffer from severe constipation and IBS which connect with free radical activity.

The Vega DFM 722 shows low brain energy.

HRBM – Agglutinated RBC's (rouleaux)

Low antioxidants profile



Case 9452

M-44 years – brown iris

Clinical history: stress, fatigue, lost of memory, impatient, nervous, aggressive.

Bad dietary style, high meat intake – Eat little vegetables, no fruits – smoke 40 cigarettes per day.

The very dense lipid ring shows low TAS (low SOD induction). The brain blood vessels are probably sticked with lipid peroxide sticked on the membrane wall. Low O₂ status – High oxidation.

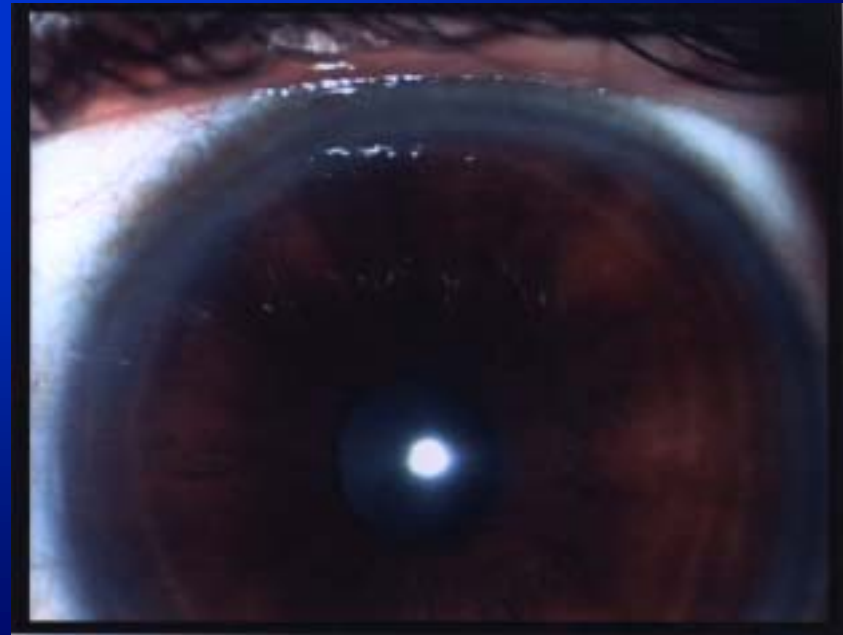
Biological age: about 55 years old – chance of life extend 10-15 years.

Possible events: Heart infarct – Brain stroke.

Case 8566.1

M-36 years old – brown iris –

Fairly good constitution



Serious nervous depression. Feel bewildered, loss of reality. Amnesia, fatigue, insomnia, chronic constipation. Bad dietary habits. High fat intake. Look and feel old for her age. One aunt died of P.D. and A.D.

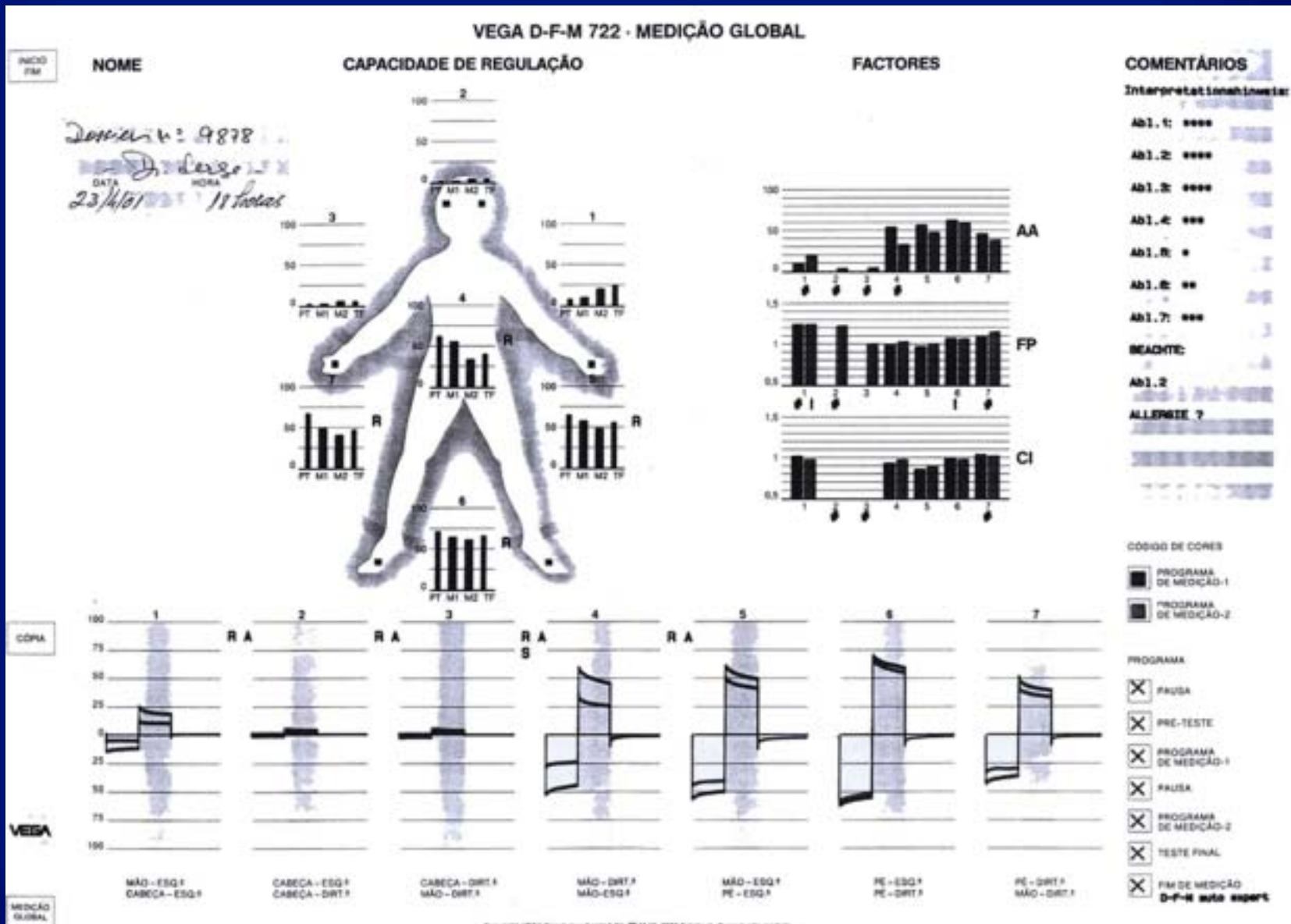
Iris shows heavy lipid ring on brain area.



Case 9878 – F. 40 years old (1)

Case 9878 – F. 40 years old (2)

Test Vega DFM 722

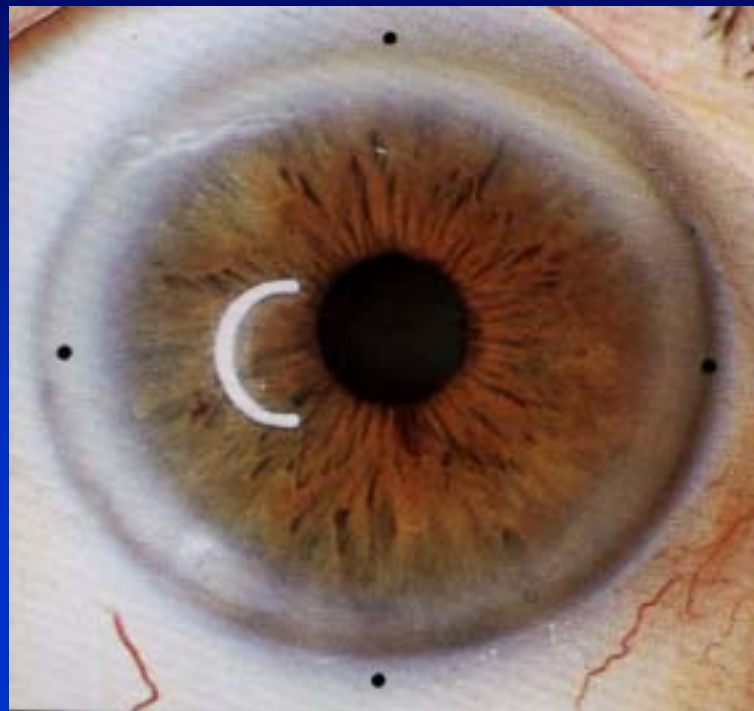


These cases of the sodium ring indicate hardening of the arteries, which always affects the heart. It also affects every other organ in the body, producing an anaemic condition because the blood can't get through the hardened tissue.

In one case, you see the sodium ring only in the lower part of the iris. We find that people with this sign complain about leg conditions most.

When found only in the upper part of the eye, we find they are complaining about brain symptoms such as lack of concentration, memory, so forth.

This may be the beginning of Alzheimer's disease.



Notice the cloudy white reflection in the pupil. This indicates calcium out of solution and the development of cataracts. The sodium ring is also called the cholesterol ring.

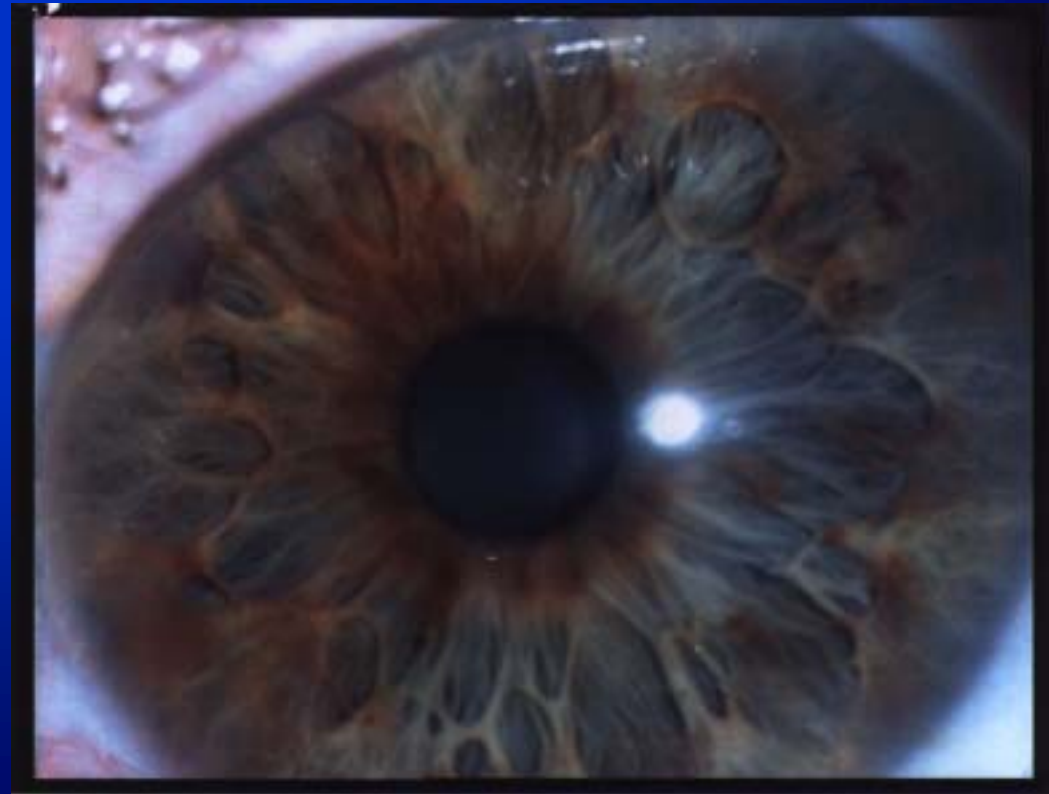
Alzheimer's disease is associated with the sodium ring found in the iris, indicating hardening of the arteries and calcium deposits in the brain. Autopsies have shown four to six times the level of aluminum in brain cells as compared to normal, which reinforces iridology's discovery almost a century ago that chemical elements such as iron, sulphur, calcium, lead and so forth become toxic settlements in the tissue. Iridology is an important but neglected diagnostic tool in identifying Alzheimer's disease.

Poor constitution (Hypercaloric diet – high fat intake)

Iris collar: mixed collar – aging process

Poor inherited nervous system- Extend ANW, poor nervous response and bad organic functions. Poor brain function. Very bad ballooned colon. Brown collar around the pupil indicates compromise GUT system. Typical example of the neural-arc-reflex involving the bowel. Bad circulation. Poor oxygen supply to brain area. High oxidation

Poor detoxification ability



Case 8148 – 1999

F.45 Years old – 1,68m – 103 Kg

- Biological age between 53-57 years

Clinical story: mother died of colon cancer – Father suffers from intestinal dysfunction.

Malignant tumour uterus (surgery): Constipation up to 8 days with no evacuation. She feels very tired, major fatigue in the legs – very nervous – insomnia – amnesia – low brain energy – low antioxidants status.

Iris: Very ballooned bowel, poor tonus, spasmodic – distension of the A.N.S. most found in the descending and sigmoid colon section – inflammatory process – very weak nervous system. Weak resistance – mechanical pressure on the uterus – fungal bacterial invasion.

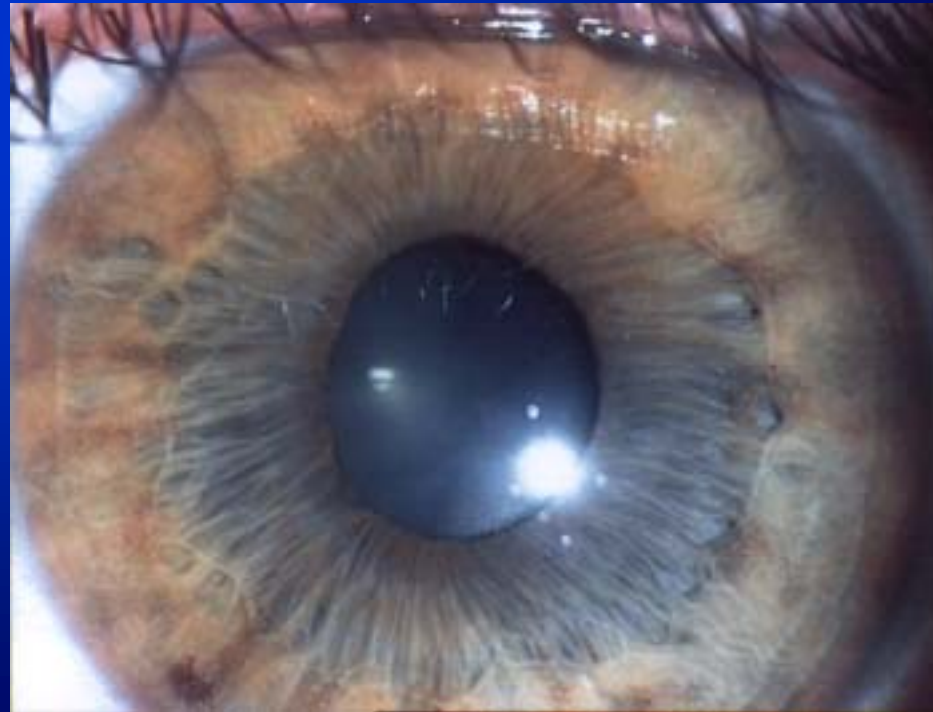
Treatment previous to surgery – Thus no metastasis spread

Therapies: Low molecular antioxidant 24 gr. per day.

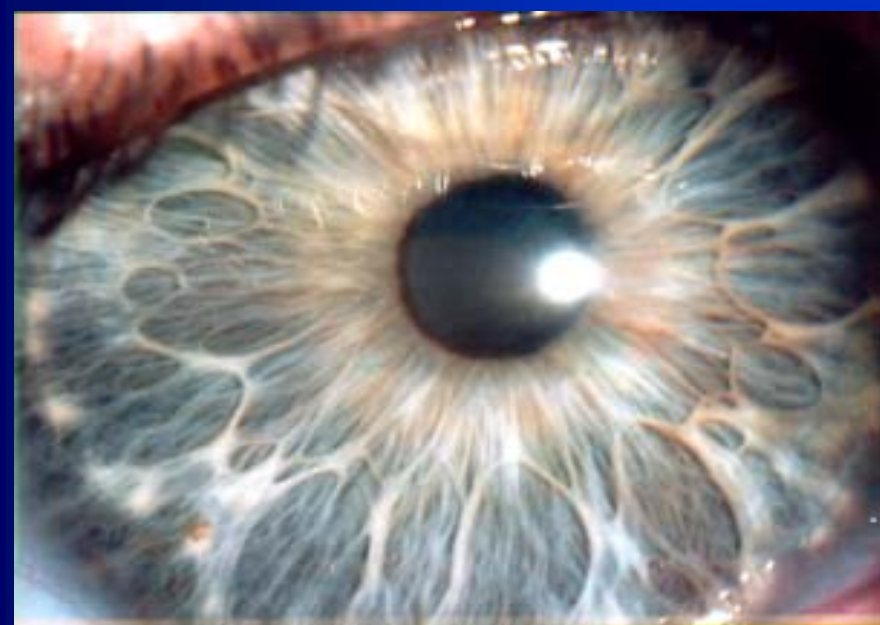
Zell-oxygen – Car-T-cell - SGES

2000 – Remain in good condition – much higher brain energy

Through detoxification she eliminated large quantity of intestinal worms



Case 9840 – M.26 years old – Brain tumour
3 surgery – Follow chemotherapy and radiotherapy
Colour of the iris - Blue



Suggestive Treatments

My recommendation: increasing ATP production (with fewer free radical activities)
Magnesium, coenzyme A, iodine, iron, glutathione, coenzyme Q10 etc.

Vitamins B1, B2, B3, B5, B12 – essential to energize tissue production and cell respiration. It fights poor mental functioning.

Depression- Anxiety disorders – fatigue PD.AD.

SOD in some assimilable compound is most required as influence lifespan (in my practice I use a low molecular compound SOD which proves efficient in many diseases also in moderate stage of AD. Lost of memory) Doses – 18 gr per day.

Vitamin E – is a core nutrient, a prime antioxidant which protects nerve cells from damage and lipid peroxidation. – From 800 – 2000 IU per day.

Detoxification and regeneration of the body

Damage colon – Poor bowel function – blood cleaning - Increasing oxygen supply to tissue and brain – Eliminate lipid peroxide accumulation.

Hot baths – (energy sand bath – ESB from SGES)

Steam bath.

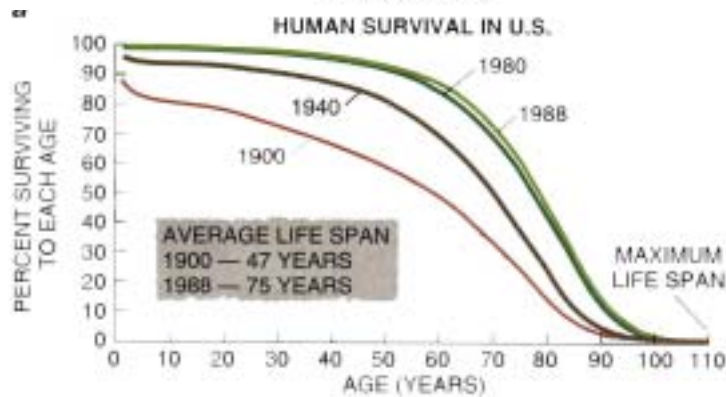
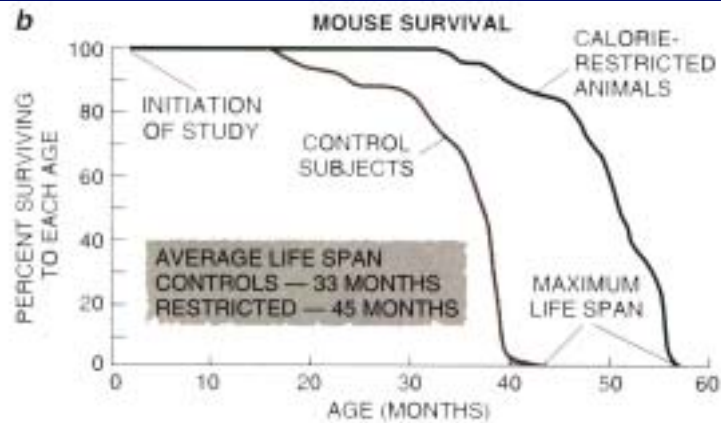
Detoxify drinks.

Brain nutrients + Detoxification Higher Redox
increasing energy level to brain.

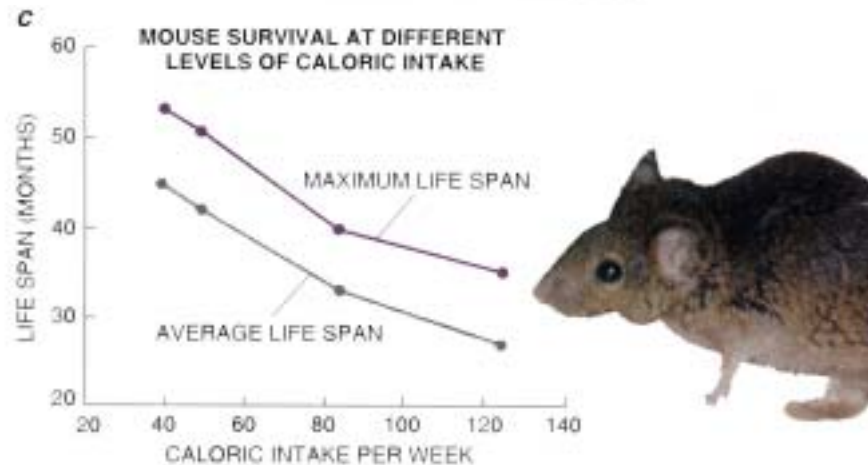
Diet: Low calories or restrict dietary intake to 2000 calories.

Number of studies show the benefits of caloric-restriction against free radical and aging process (but with optimal nutrition and reduced fat intake).

Weindruch, Wolford R – The retardation of aging and disease by dietary restriction – Springfield – Thomas 1988.



SOURCE: U.S. Bureau of the Census; National Center for Health Statistics



Coenzyme Q10 is some assimilable form in strongly suggested COQ10 is a “neuroprotective agent” and a strong antioxidant. It increases energy level. Levels have been show to be well below normal in normal aging people. (Bruce Aims)

Gingko Biloba: Very efficient to increase blood flow to the tiny vessels and in the brain – work as antioxidant – improve memory – Have been experimented in AD in many studies with significant improvement in mental functioning.

In my own practice I recommend a gingko biloba dosage of 1000 mg + ginseng extract in a liquid form.

Enzymes Yeast Cells (liquid) – 14 vitamins – 17 minerals – all the amino acids – vitamins B complex – Enzymes of the redox (all intact) SOD, methionine, nucleic acid, etc...

Also to detoxify and increase and/or bypass blockage in the R.C.

Other suggestions include a good mental activity to keep nervous system active and promote outgrowth of dendrites and synapse formation and stabilisation. That would include intellectual enrichment as has been shown as positive factors in “Brain battles against aging and Alzheimer’s disease.

Mark P. Mattson

Experimental models of Alzheimer’s disease

Science Medicine – page 24-25

March/April 1998



More information can be obtained from my publication.

Mitochondria DNA mutations in aging and degenerative diseases – iridology profile and treatments – (80 pages).

New Millennium
International Iridology Symposium
November 2000 London.

Thank you for your attention.

SERGE JURASUNAS