



# Innate Intelligence: Tapping Into The Wisdom of The Body With Ketosis

*Ben Azadi*

*4x Best Selling Author*

*Founder of Keto Kamp*

April 15-16, 2022

**KETO**  
SALT LAKE



IN KETO FLEX, BEN LAYS OUT A STRATEGY FOR DRASTICALLY **IMPROVING METABOLIC HEALTH**

WITH SIMPLE STEPS THAT INVOLVES ADJUSTING NOT ONLY WHAT YOU EAT, BUT ALSO WHEN YOU EAT. IF YOU'RE SEARCHING FOR A CLEARER VIEW OF YOUR HEALTH, THIS BOOK WILL PROVIDE THE INSIGHT AND STRATEGY YOU'VE BEEN LOOKING FOR.




DR BENJAMIN BIKMAN  
AUTHOR OF WHY WE GET SICK

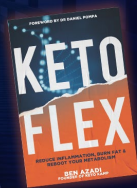

BEN AZADI IS, WITHOUT A DOUBT, ONE OF THE **EMERGING LEADERS** IN THE KETO, LOW CARB SPACE. HIS KNOWLEDGE, ENTHUSIASM AND POSITIVITY IS INFECTIOUS AND HIS TAKE ON KETOGENIC DIETS IS REFRESHING. I LOVE THAT BEN'S APPROACH TAKES INTO ACCOUNT BIO-INDIVIDUALITY AND FULLY EMBRACES FINDING YOUR OWN PATH TO WELLNESS.




CYNTHIA THURLOW  
2X TEDX SPEAKER, NURSE PRACTITIONER AND FUNCTIONAL NUTRITIONIST

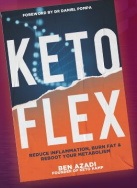

BEN'S NEW BOOK KETO FLEX EXPLORES DIFFERENT APPLICATIONS OF WAYS TO **DIET & FASTING**

KETO FLEX PROVIDES THE LATEST IN RESEARCH AND PRACTICAL STRATEGIES. THIS IS A GREAT READ FOR UNDERSTANDING WEIGHT LOSS, HEALTH AND LONGEVITY.

DR JASON FUNG  
NEW YORK TIMES BEST SELLING AUTHOR OF THE OBESITY CODE

BEN AZADI PROVIDES YOU WITH A CLEAR BLUEPRINT FOR EVERYONE TO TAKE CONTROL OF THEIR WAISTLINE, BLOOD SUGAR AND OTHER METABOLIC MARKERS. THESE TIME-TESTED METHODS ARE SIMPLE, PRACTICAL WAYS TO REGAIN CONTROL OF YOUR HEALTH USING **NATURAL DIETARY METHODS** INSTEAD OF MEDICATIONS.

MEGAN RAMOS  
CLINICAL RESEARCHER, NEW YORK TIMES BEST SELLING AUTHOR OF LIFE IN THE FASTING LANE

# Praise For Keto Flex

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## Only 12 percent of American adults are metabolically healthy, study finds

Trends help sound alarm for efforts to lower associated risk of types 2 diabetes, heart disease and other complications

*Date:* November 28, 2018

*Source:* University of North Carolina at Chapel Hill

*Summary:* The prevalence of metabolic health in American adults is 'alarmingly low,' even among people who are normal weight, according to a new study. Only one in eight Americans is achieving optimal metabolic health. This carries serious implications for public health since poor metabolic health leaves people more vulnerable to developing Type 2 diabetes, cardiovascular disease and other serious health issues.

*Share:*



<https://www.sciencedaily.com/releases/2018/11/181128115045.htm>





# The Sickening Statistics on Diabetics

- 60 percent of Americans are diabetic or pre-diabetic
- 68 percent of these diabetics end up with heart disease
- 16 percent will have a stroke
- 70 percent end up with neuropathy where their nerves are degenerating
- The above statistics apply to those who are on medication. Most people don't understand that just because you are taking medication, it doesn't mean you are exempt from this set of statistics. Diabetes medication shows that the sugar levels may be getting better, but the diabetes is getting worse.



# Here Are More Statistics...

**1 out of 3 women  
are diagnosed  
with cancer  
1 out of 2 men are  
diagnosed with  
cancer**

**60%+ of  
Americans are  
diabetic or  
prediabetic**

**By 2032 it's  
predicated that 1  
out of 2 children  
will be born on the  
autism spectrum**



TOXIC PILLS  
AND SURGERY

97%

LIFESTYLE  
CHANGE

3%



Human beings are the only  
species smart enough to create  
their own food, and dumb  
enough to eat it!



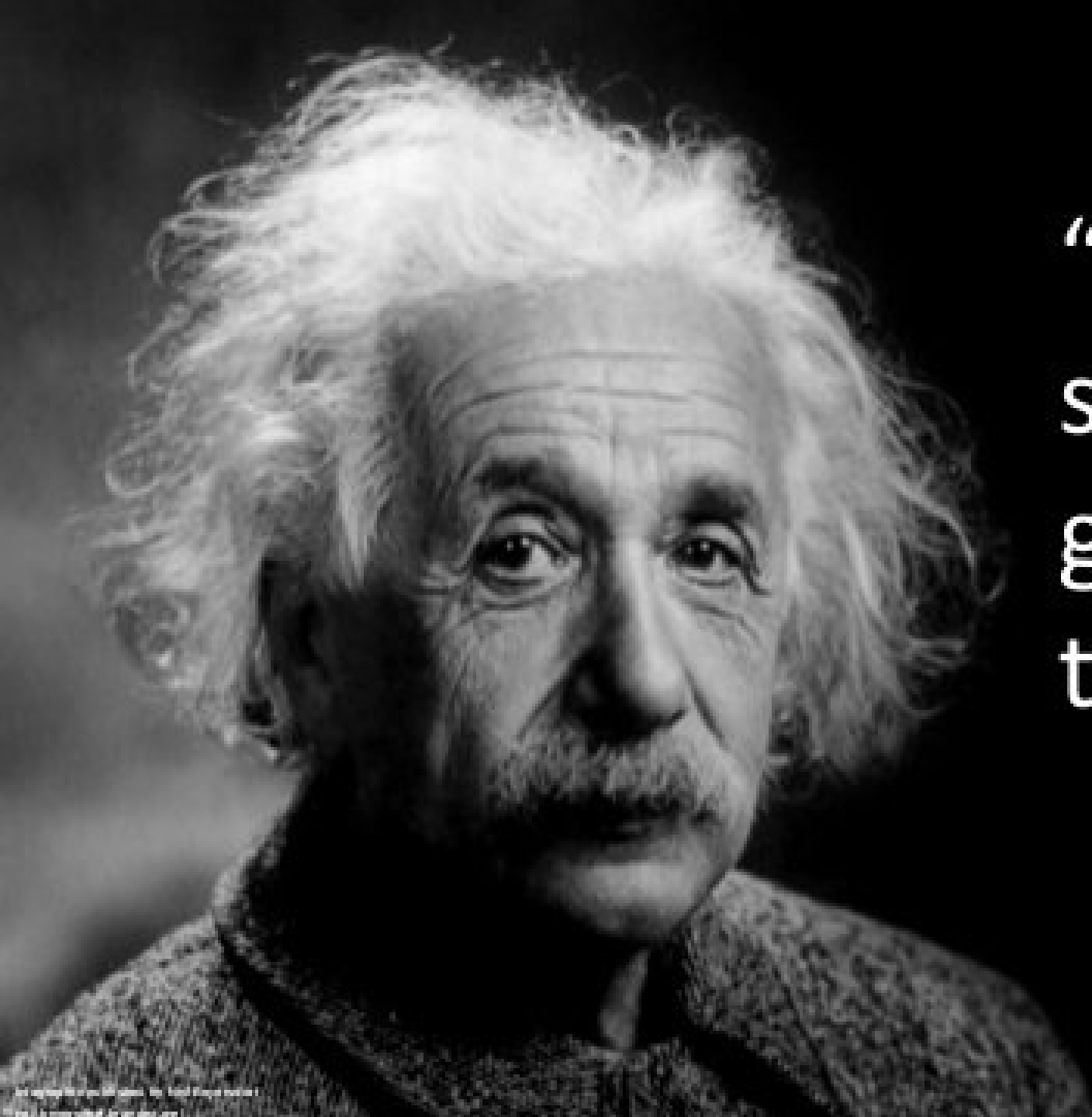
A portrait of Alvin Toffler, an elderly man with glasses, resting his chin on his hand. He is wearing a dark suit jacket over a light-colored shirt. The background is dark and moody.

**“THE ILLITERATE OF THE 21<sup>ST</sup> CENTURY**

**WILL NOT BE THOSE WHO  
CANNOT READ AND WRITE,  
BUT THOSE WHO CANNOT  
LEARN, UNLEARN AND RELEARN.”**

**~ALVIN TOFFLER, FUTURE SHOCK**





“Intellectuals  
solve problems;  
geniuses prevent  
them.”

*Albert Einstein*



# Unlocking the health code



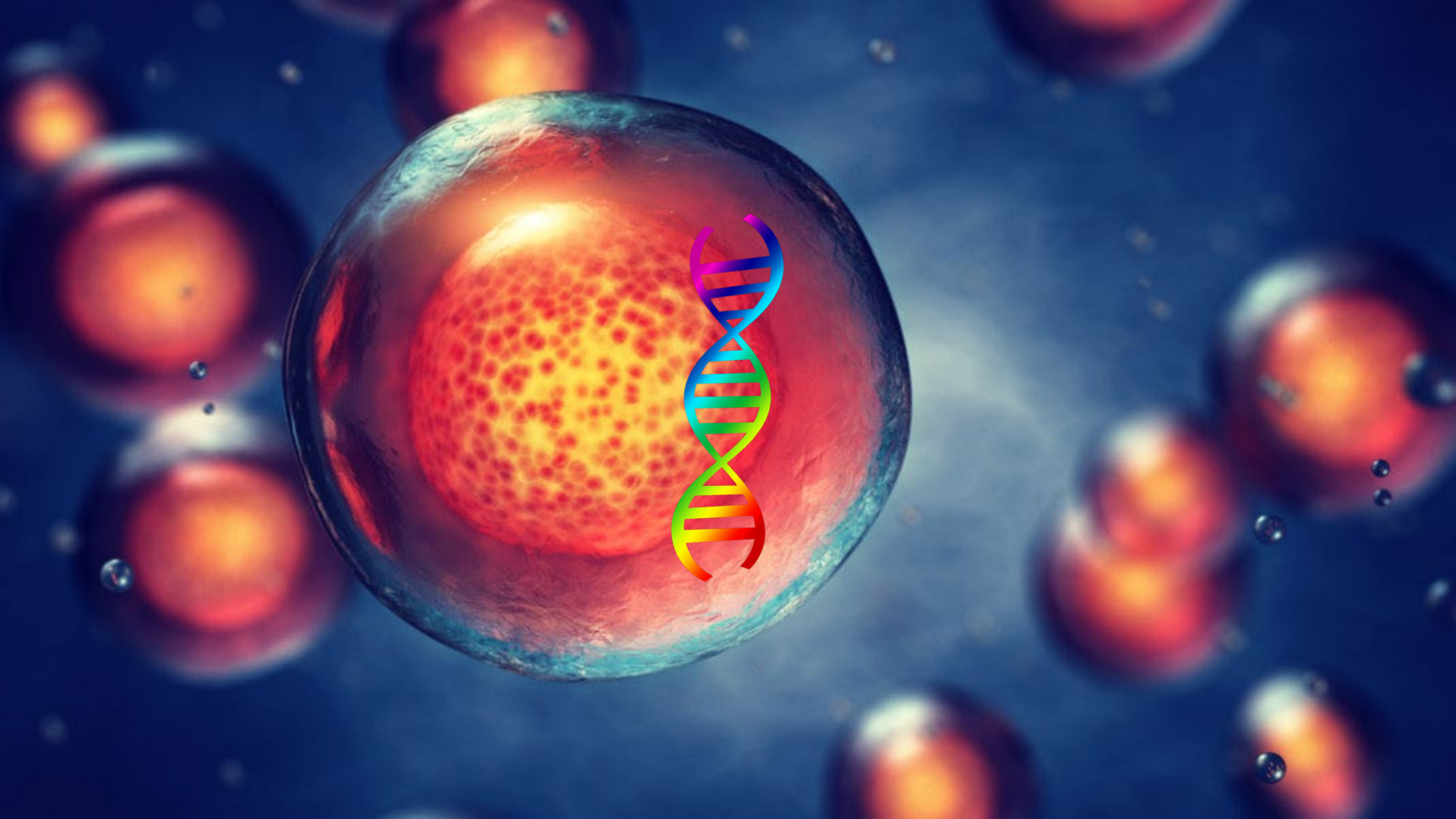


What is the  
innate  
intelligence?

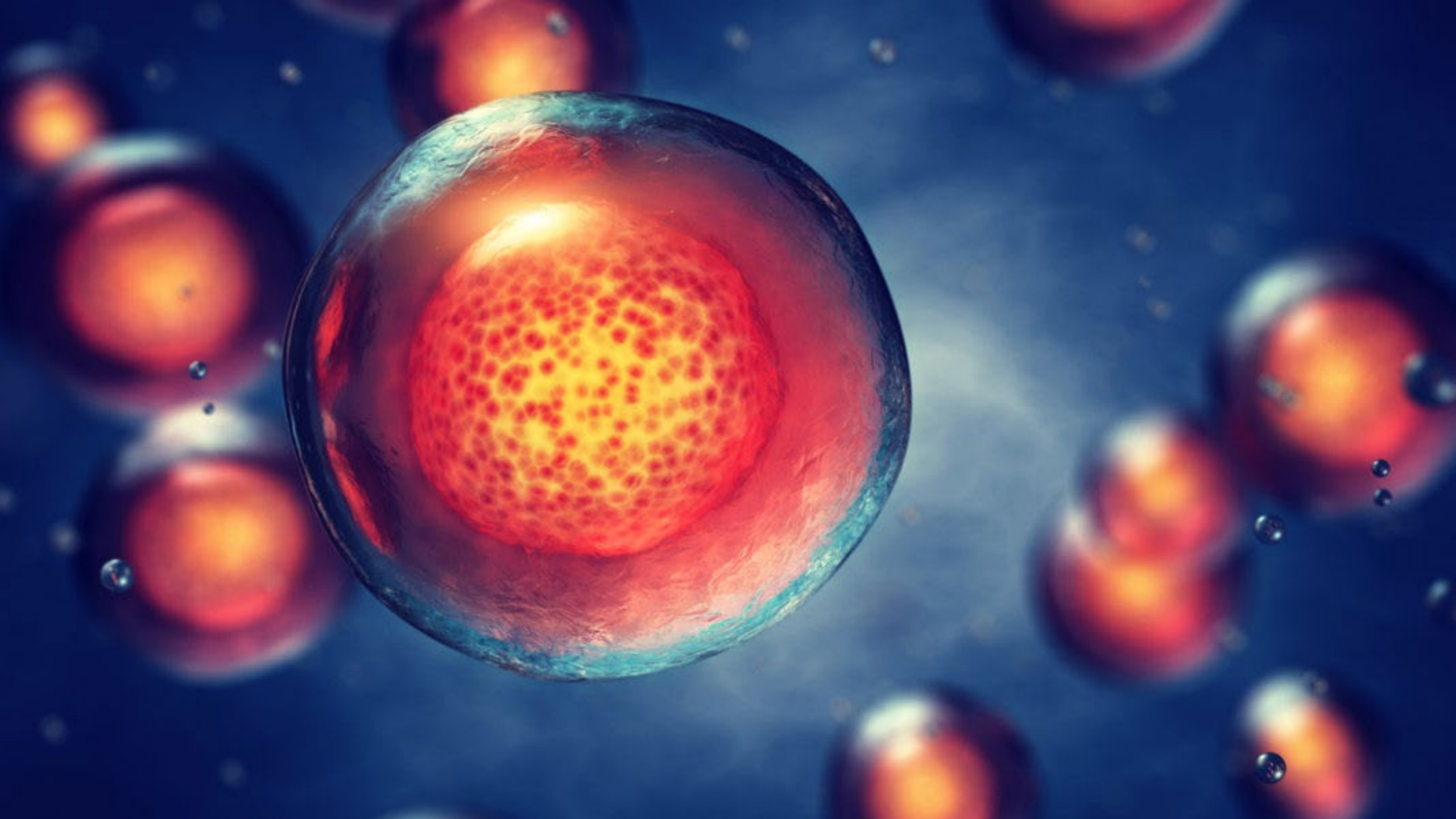


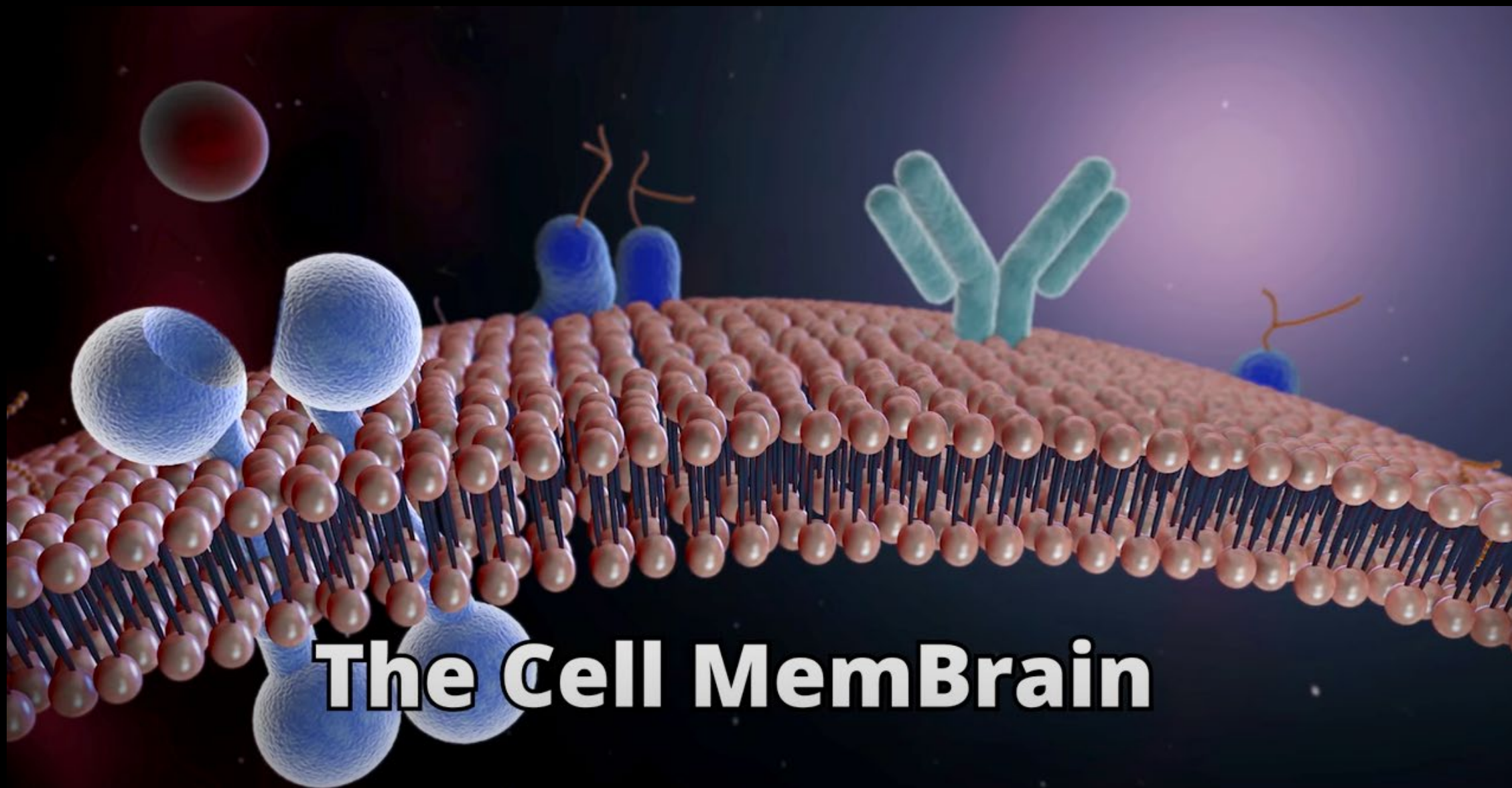
**Are we victims of heredity?**











**The Cell MemBrain**

Environmental stimulus binds to cell membrane



Environmental stimulus binds to cell membrane



Chemical reaction inside the cell reaches nucleus

Environmental stimulus binds to cell membrane



Chemical reaction inside the cell reaches nucleus



A gene becomes expressed as protein

The two sources of fuel available for your cells...

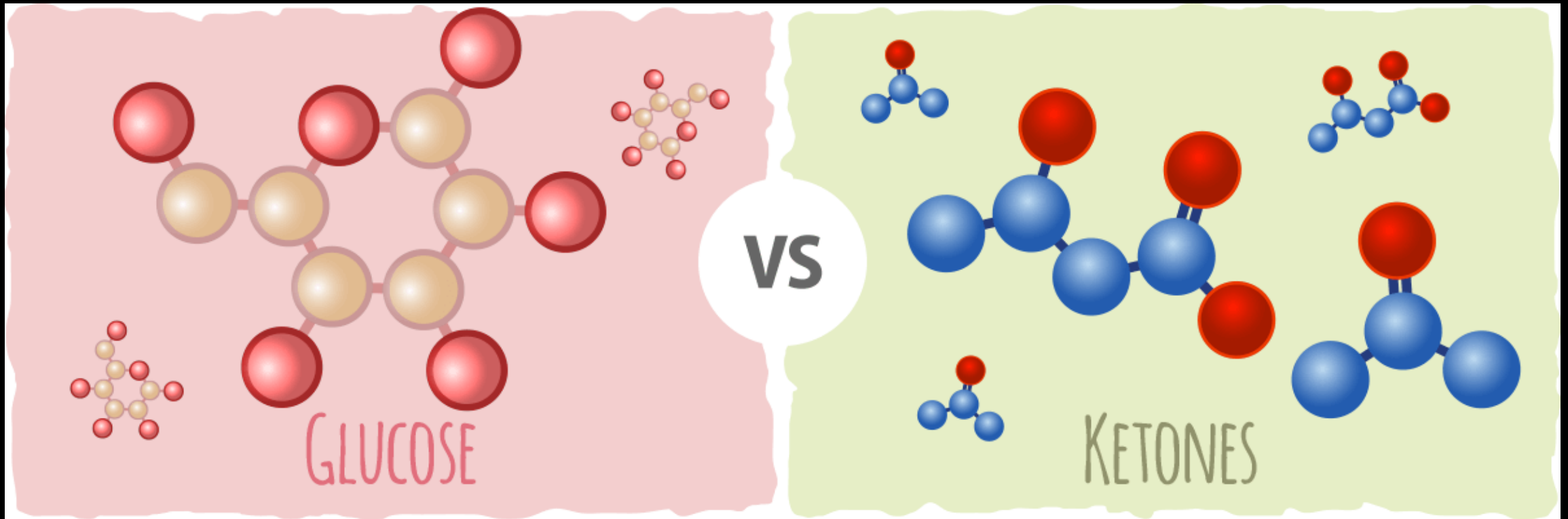


Photo credit: ruled.me

# How to tap into your innate intelligence with ketosis

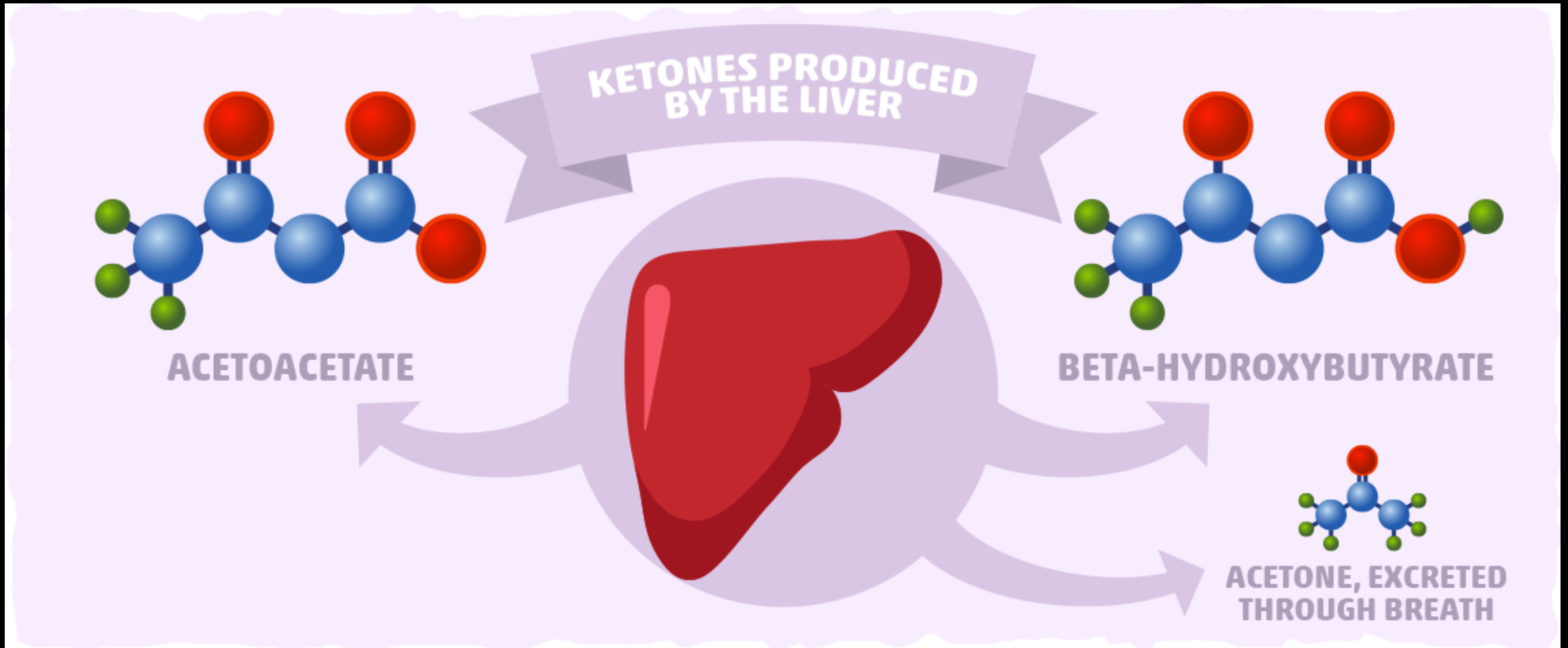


Photo credit: ruled.me



# KETO IS ONE OF THE TOP SEARCH TERMS ON DR. GOOGLE

## What is the keto diet?

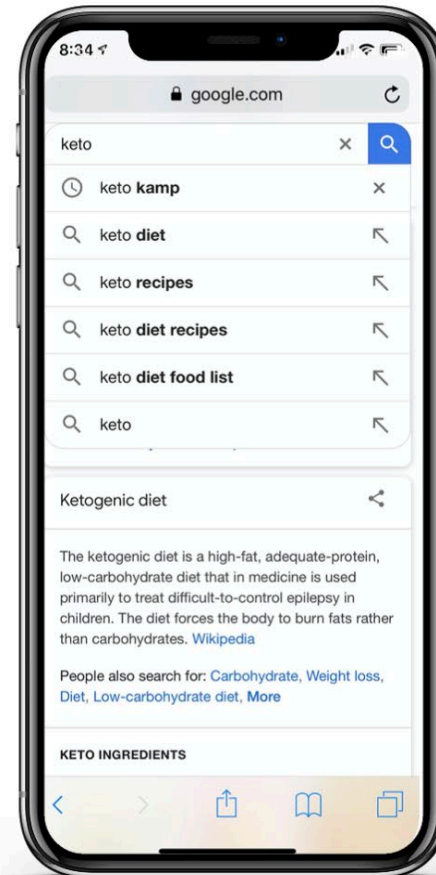
Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.

## How do you prevent the keto flu?

Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.

## Healthy fats for the keto diet

Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.



## Is the keto diet safe?

Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.

## How to lose weight with the keto diet

Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.

## Does keto cause heart disease?

Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.  
Confusion. Confusion. Confusion. Confusion. Confusion.







# THE SCIENCE ON KETONES IS CLEAR!

## Lungs

More and more studies are appearing about the benefits of a ketogenic diet for a growing number of disease states. Epilepsy, Metabolic syndrome, Polycystic Ovary Syndrome, Diabetes, Autism, Obesity, Migraine, Parkinson's disease and COPD all have one thing in common – NLRP3 inflammasome.

## Liver

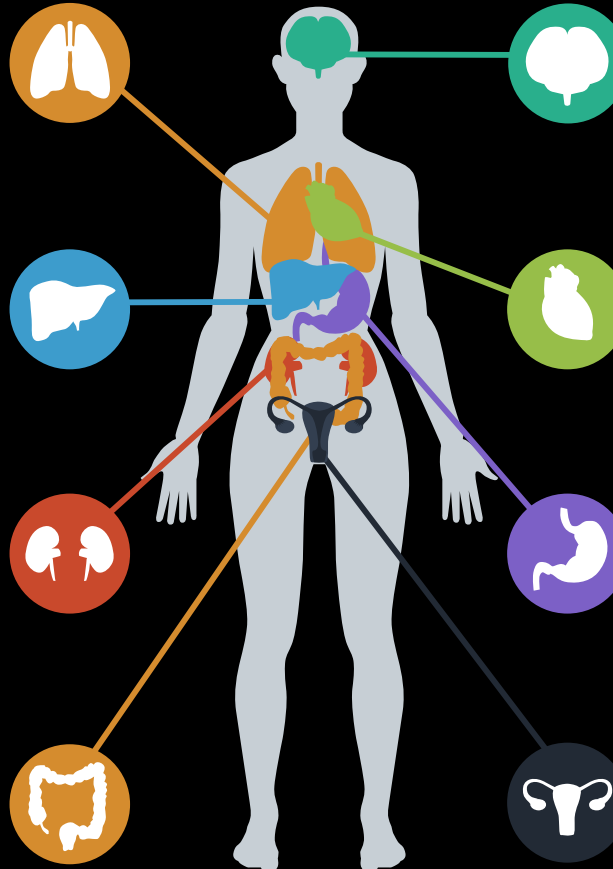
The liver is the soccer mom of all organs. If she is unhealthy, it will be difficult to lose weight and have clear skin. The Keto diet has been proven to reverse fatty liver.

## Kidney

Low carb diet may even improve renal function thanks to its weight loss effects.

## Bowel

Improvements in irritable bowel symptoms are commonly reported.



## Brain

The brain is made up of mostly fat. Ketones provide the brain with 3x more energy than glucose.

## Heart

Ketones are a powerful way to down regulate inflammation. We know that the root cause of heart disease and high cholesterol is inflammation.

## Stomach

When you pair the keto diet with intermittent fasting, it allows your stomach and digestive system to take a much needed rest. This allows the stomach to repair itself.

## Uterus

High insulin is the cause of many uterus problems. The keto diet is a powerful way to keep insulin low.



A black bowl filled with a keto meal. The bowl contains two halves of a grilled avocado, three cherry tomatoes, and several strips of cooked bacon. A fried egg is also visible in the bowl. The bowl is placed on a light-colored cloth over a dark, textured surface.

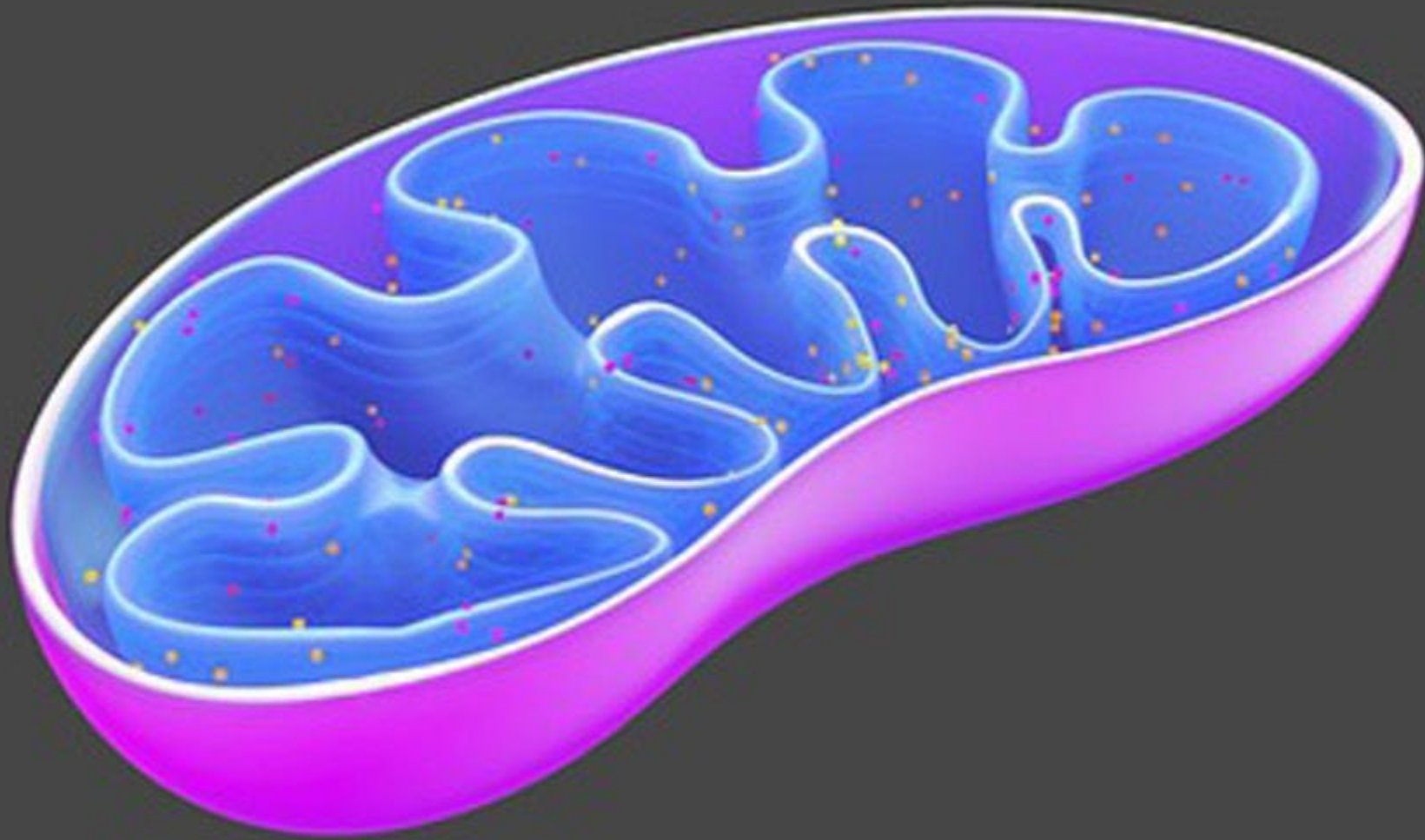
**Keto is not a diet**



**“IF YOU WANT TO GET WELL, YOU HAVE TO FIX THE CELL.”**

**- DR DANIEL POMPA**

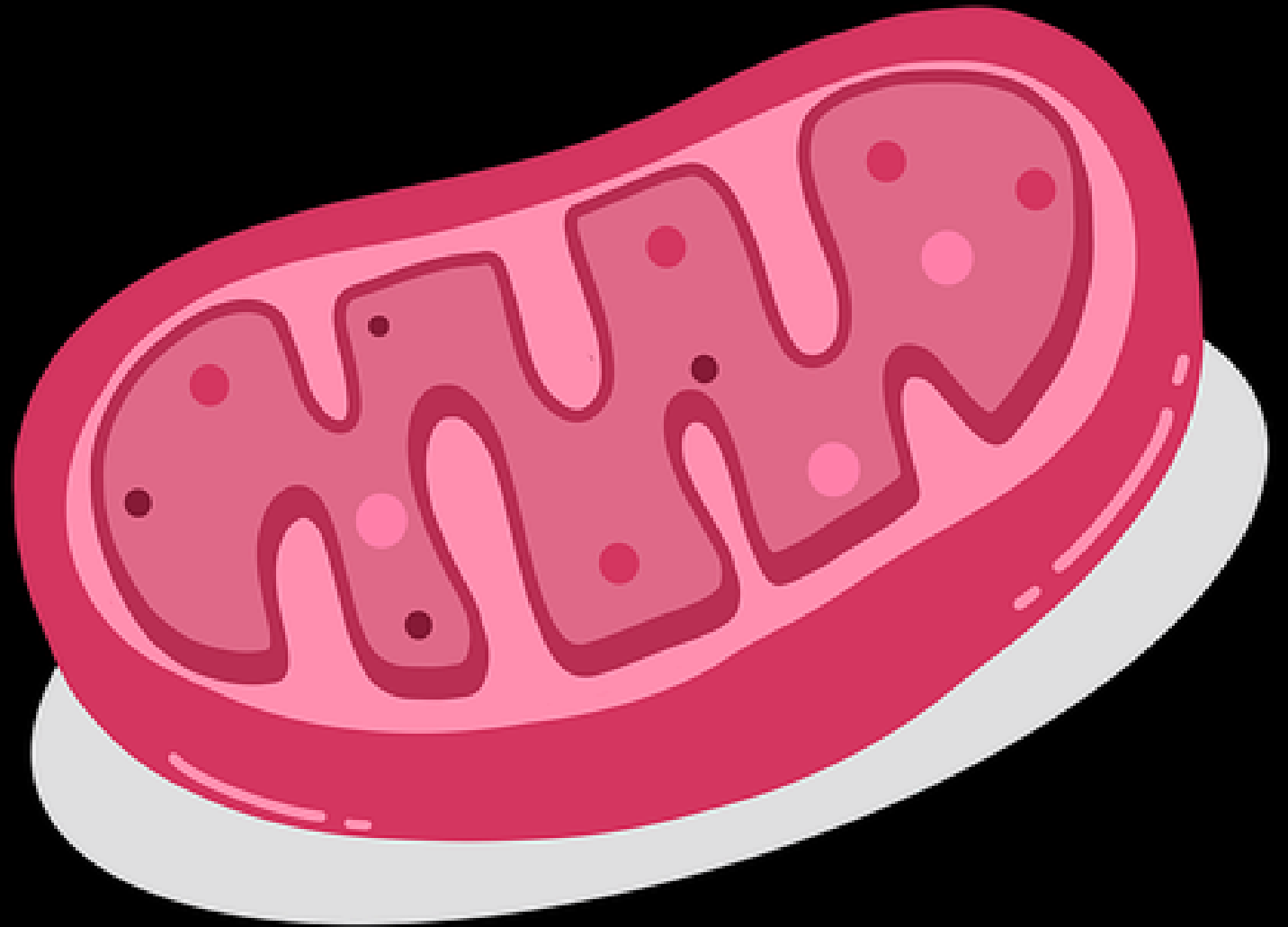




**THE MIGHTY MITOCHONDRION**

# QUIZ TIME...

Which cells have the  
highest concentration of  
mitochondria?









# Fuel Sources

Glucose  
Fatty Acids  
Amino Acids



**ATP**








## *Perspective:* Cell danger response Biology—The new science that connects environmental health with mitochondria and the rising tide of chronic illness

Robert K. Naviaux 

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<https://doi.org/10.1016/j.mito.2019.12.005>

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# THE ROLE OF MITOCHONDRIA IN THE CELL DANGER RESPONSE

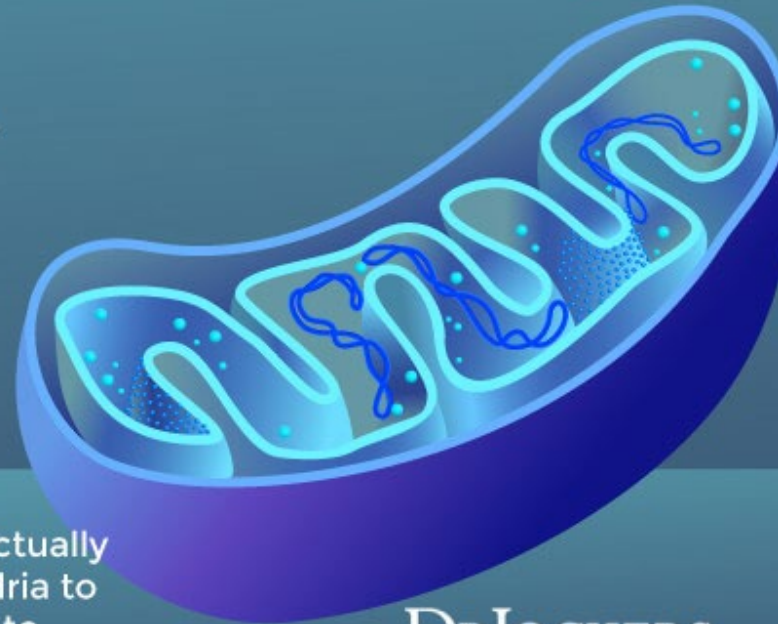
**Mitochondria** are well known for their production of cellular energy. The CDR views a dual role of the mitochondria as energy sensors and cell defense agents. Under CDR, the mitochondria turn down energy production and increase oxidative activity.

## HEALTHY CELL

Mitochondria - produce optimal energy for homeostasis and buffer oxidative stress

## CELL DEFENSE

Mitochondria - hypometabolic and produce lots of oxidative stress



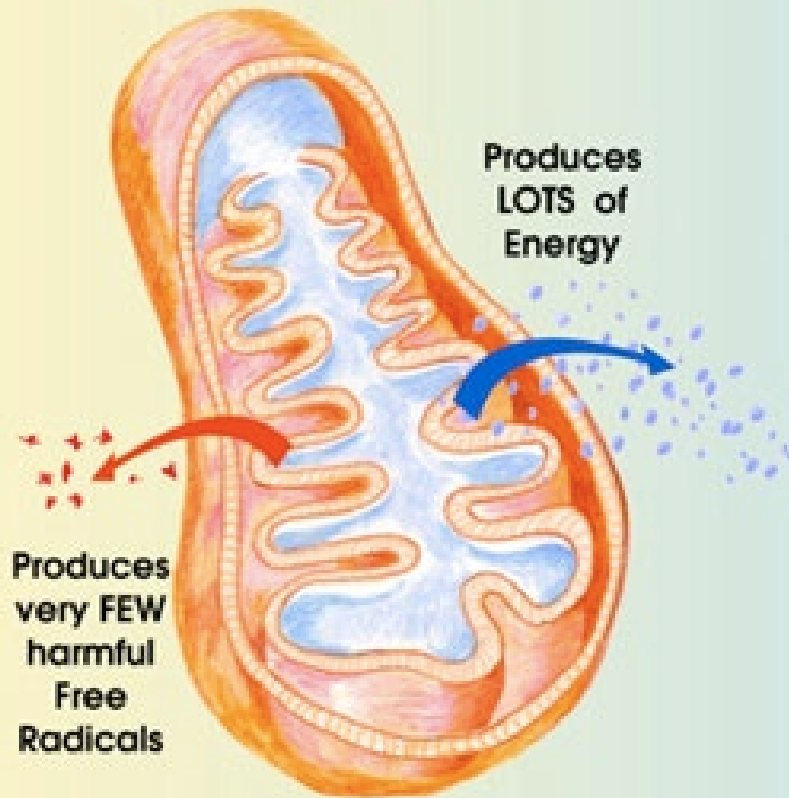
When you feel fatigued and inflamed, it is actually a purposeful response from your mitochondria to protect cells and tissues from the body due to infections, toxins, chemicals & trauma.

**DRJOCKERS.COM**  
SUPERCHARGE YOUR HEALTH

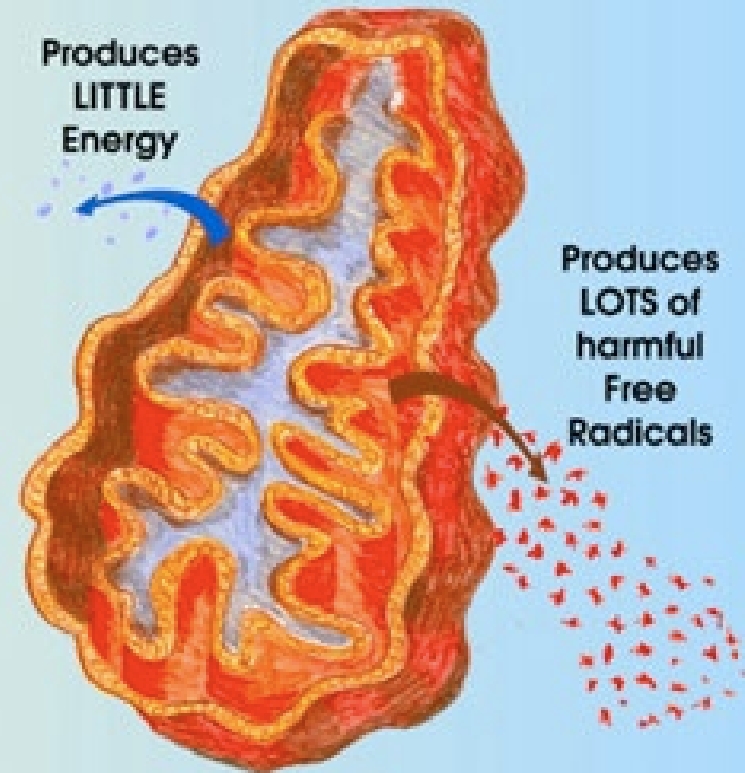


# MITOCHONDRIA

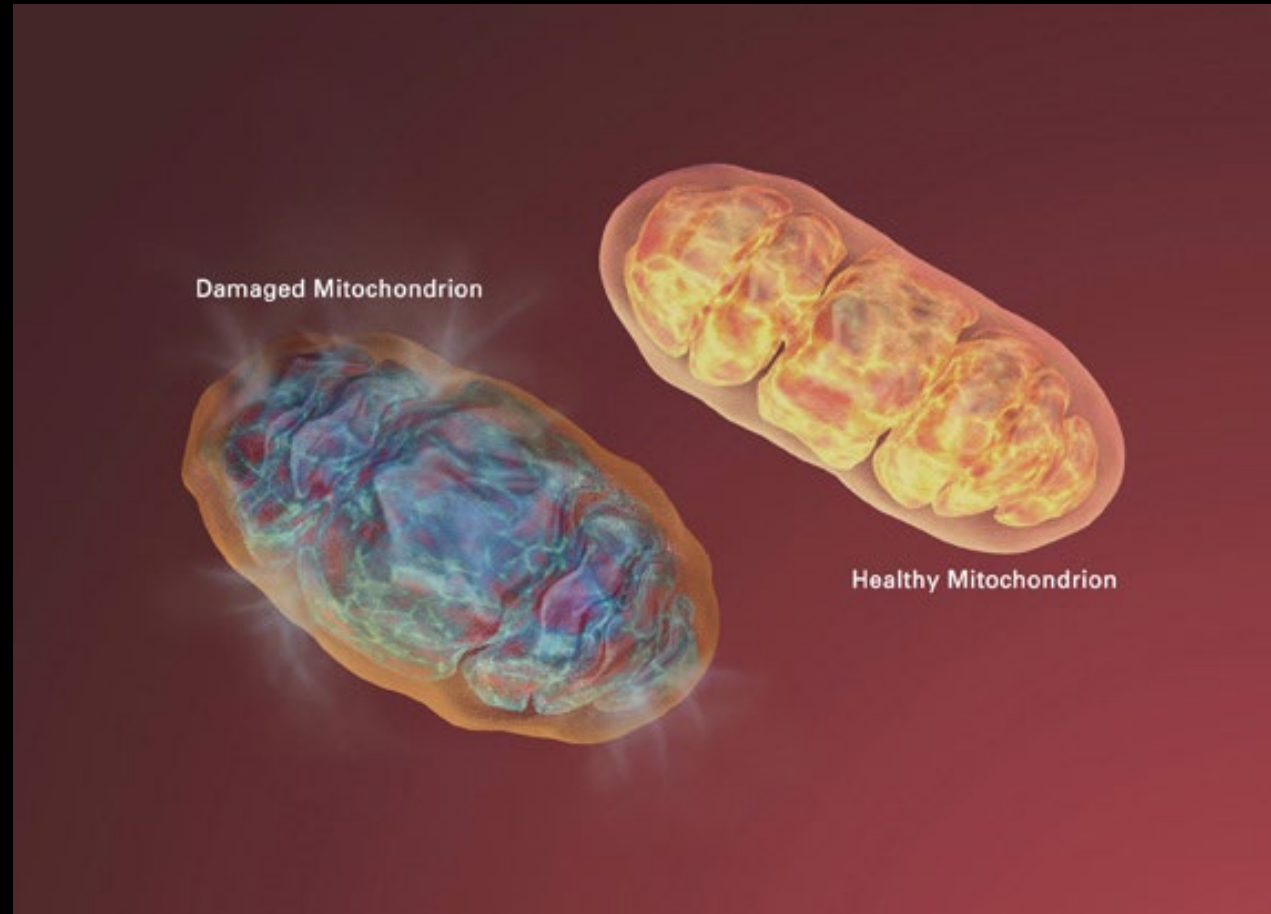
HEALTHY CELL



UN-HEALTHY CELL



70% of mitochondria is estimated to be lost by age 70



# Which option is going to get you farther?

Glucose



Ketones





Glucose  
32-36 ATP Produced



Ketones  
120-160 ATP Produced





Ketones signal to the mitochondria to make more of themselves (mitogenesis)





# Food Mart

Gasoline

Self Serve

Regular

595

10/10

Plus

598

10/10

Supreme

599

10/10

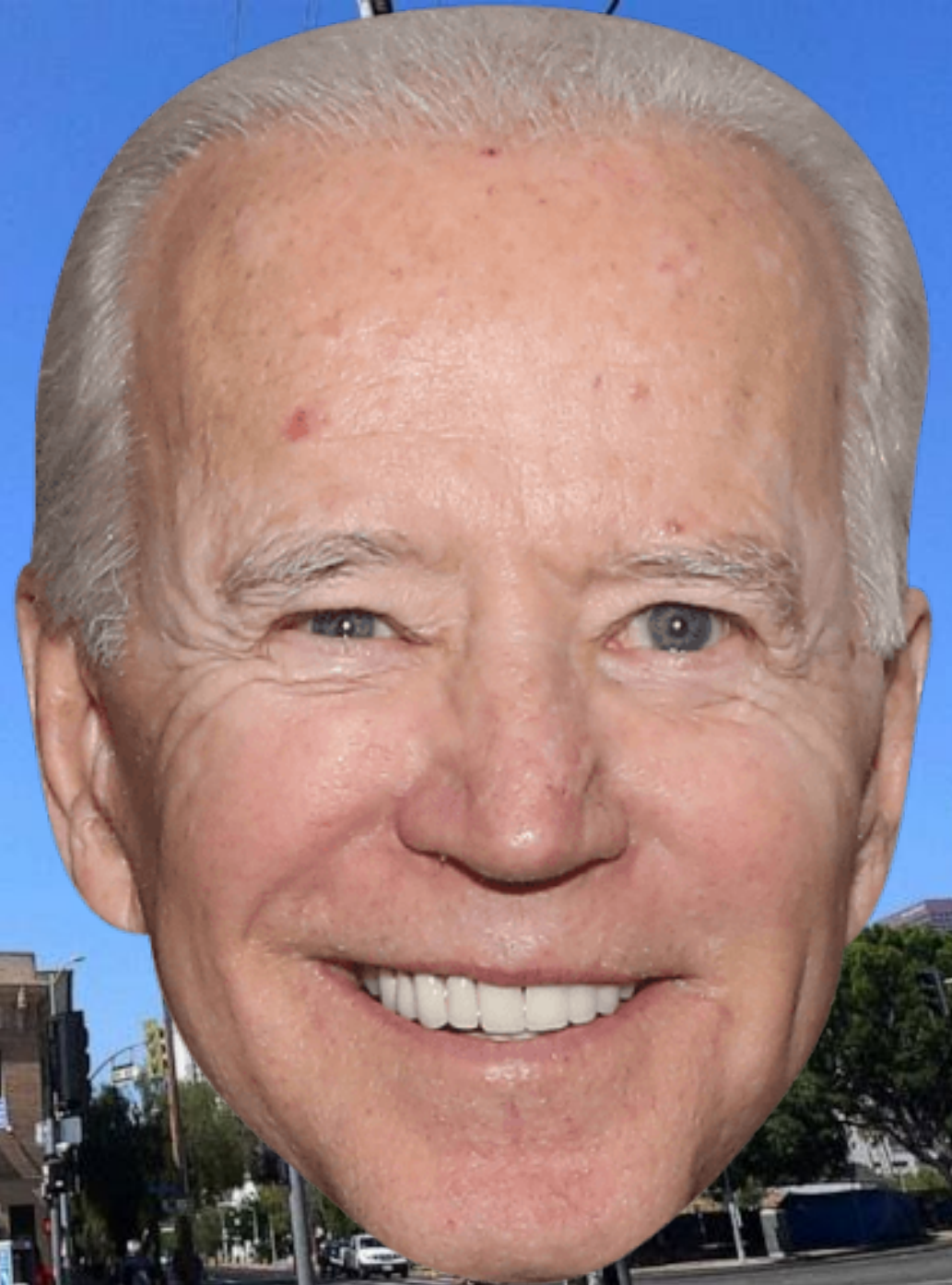
Diesel  
No.2

599

10/10

## Propane

Marlboro





WHEN THE  
MITOCHONDRIA ARE  
ONLY BURNING  
GLUCOSE (SUGAR). IT'S  
HARD TO KEEP UP WITH  
THE FREE RADICALS  
PRODUCED





**WHEN THE MITOCHONDRIA ARE USING KETONES  
THEY ARE FAR MORE PROTECTED**





[Neuroscience](#). Author manuscript; available in PMC 2007 May 5.

PMCID: PMC1865572

*Published in final edited form as:*

NIHMSID: NIHMS18758

[Neuroscience](#). 2007 Mar 2; 145(1): 256–264.

PMID: [17240074](#)

Published online 2007 Jan 18. doi: [10.1016/j.neuroscience.2006.11.065](#)

# KETONES INHIBIT MITOCHONDRIAL PRODUCTION OF REACTIVE OXYGEN SPECIES PRODUCTION FOLLOWING GLUTAMATE EXCITOTOXICITY BY INCREASING NADH OXIDATION

[Marwan Maalouf](#),<sup>1</sup> [Patrick G. Sullivan](#),<sup>2</sup> [Laurie Davis](#),<sup>2</sup> [Do Young Kim](#),<sup>1</sup> and [Jong M. Rho](#)<sup>1</sup>

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Graphical Review

# Ketone bodies, stress response, and redox homeostasis

Pedro Rojas-Morales <sup>a</sup>, José Pedraza-Chaverri <sup>a</sup>, Edilia Tapia <sup>b</sup>  

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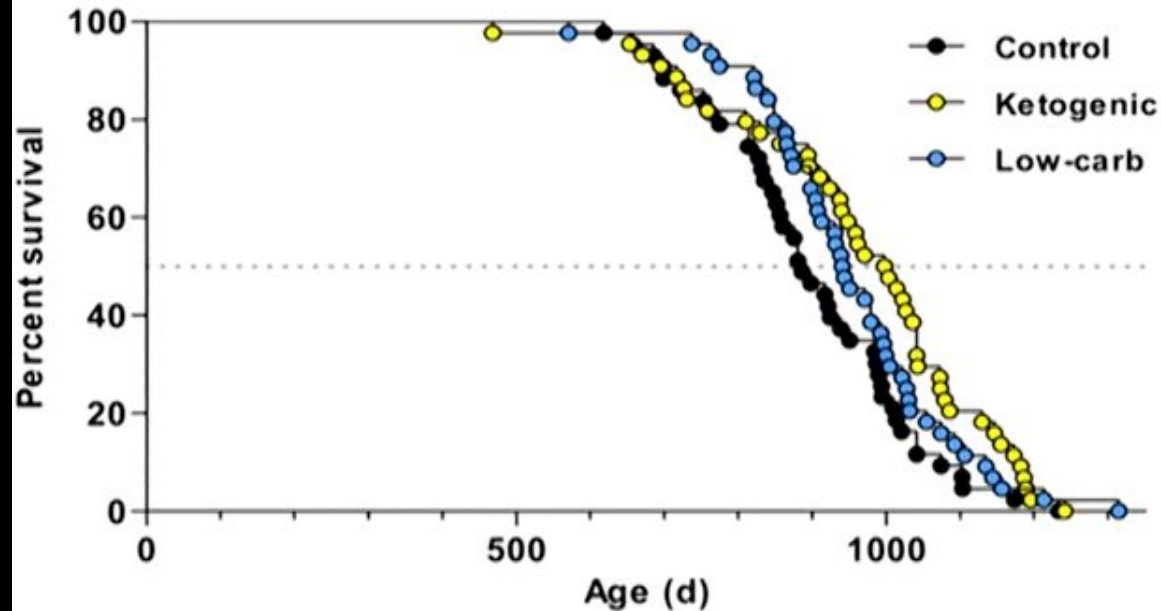
<https://doi.org/10.1016/j.redox.2019.101395>

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# Mouse lifespan: ketogenic > low carb

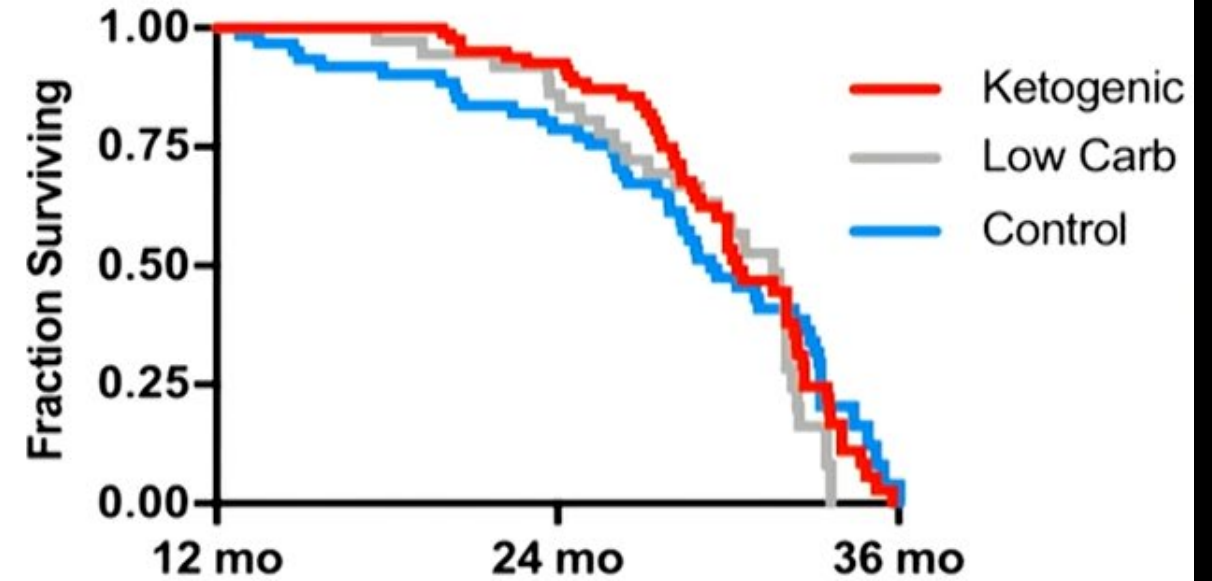


Short Article

## Cell Metabolism

**A Ketogenic Diet Extends Longevity and Healthspan in Adult Mice**

**Jon Ramsey, UC Davis**



Short Article

## Cell Metabolism

**Ketogenic Diet Reduces Midlife Mortality and Improves Memory in Aging Mice**

**Newman and Verdin, Buck**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5609489/>

<https://pubmed.ncbi.nlm.nih.gov/28877458/>

<https://www.buckinstitute.org/>

➤ [Science](#). 2013 Jan 11;339(6116):211-4. doi: 10.1126/science.1227166. Epub 2012 Dec 6.

# Suppression of oxidative stress by $\beta$ -hydroxybutyrate, an endogenous histone deacetylase inhibitor

Tadahiro Shimazu <sup>1</sup>, Matthew D Hirschey, John Newman, Wenjuan He, Kotaro Shirakawa, Natacha Le Moan, Carrie A Grueter, Hyungwook Lim, Laura R Saunders, Robert D Stevens, Christopher B Newgard, Robert V Farese Jr, Rafael de Cabo, Scott Ulrich, Katerina Akassoglou, Eric Verdin

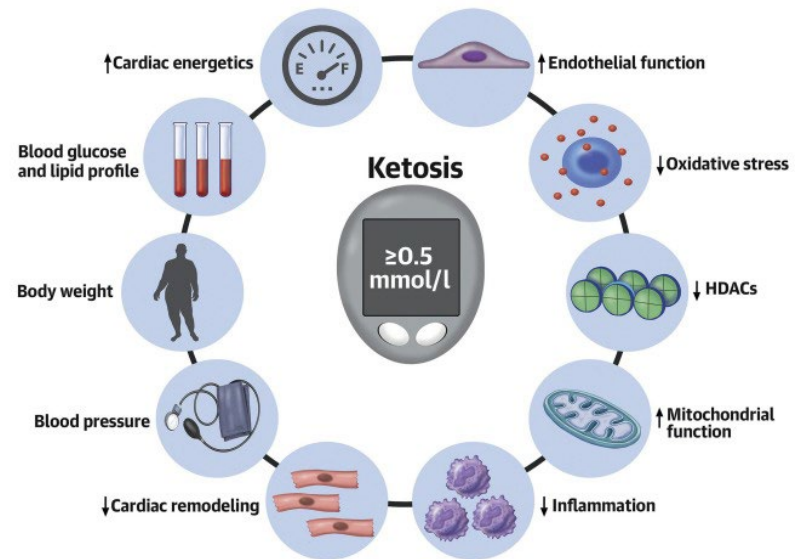
Affiliations + expand

PMID: 23223453 PMCID: [PMC3735349](#) DOI: [10.1126/science.1227166](#)

**Free PMC article**

a negative clinical stigma as they are involved in diabetic ketoacidosis. However, evidence from both experimental and clinical research has uncovered a protective role for ketones in cardiovascular disease. Although ketones may provide supplemental fuel for the energy-starved heart, their cardiovascular effects appear to extend far beyond cardiac energetics. Indeed, ketone bodies have been shown to influence a variety of cellular processes including gene transcription, inflammation and oxidative stress, endothelial function, cardiac remodeling, and cardiovascular risk factors. This paper reviews the bioenergetic and pleiotropic effects of ketone

**CENTRAL ILLUSTRATION: Bioenergetic and Pleiotropic Effects of Ketone Bodies**



Yurista, S.R. et al. J Am Coll Cardiol. 2021;77(13):1660-9.

The Present and Future  
JACC State-of-the-Art Review

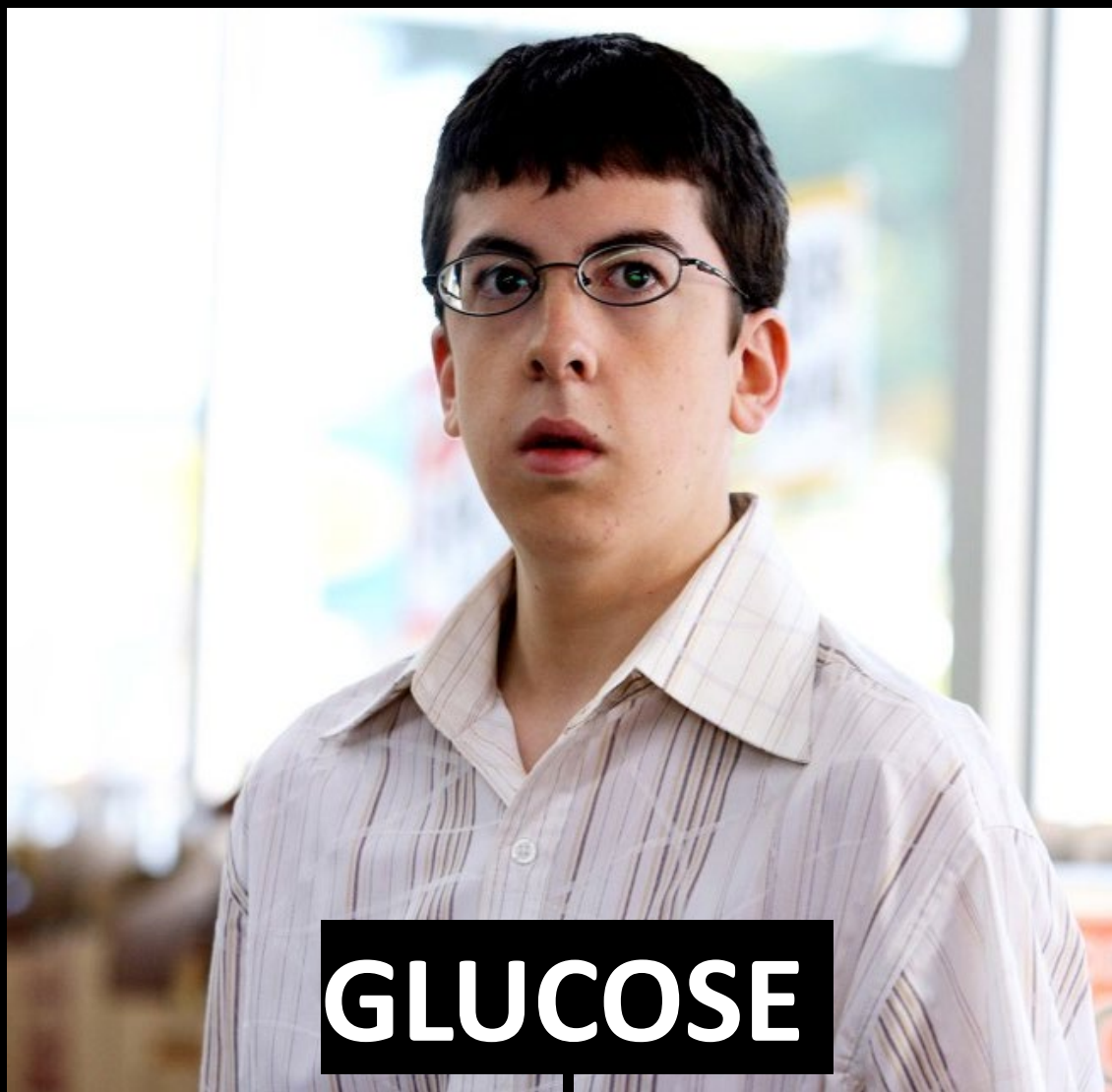
## Therapeutic Potential of Ketone Bodies for Patients With Cardiovascular Disease: JACC State-of-the-Art Review

Salva R. Yurista MD, PhD <sup>a</sup> , Cher-Rin Chong PhD <sup>b, c</sup>, Juan J. Badimon PhD <sup>d</sup>, Daniel P. Kelly MD <sup>e</sup>, Rudolf A. de Boer MD, PhD <sup>a</sup> , B. Daan Westenbrink MD, PhD <sup>a</sup>   





**KETONES SIGNAL MITOCHONDRIA UNCOUPLING**





# Breastfed babies are in ketosis

<https://pubmed.ncbi.nlm.nih.gov/15573408/>  
<https://pubmed.ncbi.nlm.nih.gov/15916931/>  
<https://pubmed.ncbi.nlm.nih.gov/10652985/>




# Ketones: “High Octane” Brain Fuel

“Throughout much of human evolution, ketosis likely served as a valuable survival mechanism to fuel brain metabolism during times of food scarcity. Hence, **in some ways, the modern diet can be considered “keto-deficient.”** (Henderson, 2008)





A detailed collage of various keto-friendly ingredients arranged on a dark wooden surface. The ingredients include: a large piece of raw red meat (beef or lamb) on a wooden cutting board; a fresh salmon fillet; a whole raw egg; a halved avocado showing its green flesh and pit; a wedge of Swiss cheese; several almonds scattered around; green beans; cherry tomatoes; a head of garlic; a small bowl of red peppercorns; a small bowl of mixed peppercorns; and a piece of cooked ham. A black frying pan is visible in the top left corner.

# Clean keto vs dirty keto





WHICH IS WORSE FOR YOU? 2 PACKS OF CIGARRETES EACH DAY OR COOKED VEGETABLE OILS?





Dr Cate Shanahan, MD



Professor Brian Peskin, MIT





**What are the chances of developing lung cancer for someone who smokes 2 packs of cigarettes every single day for 28 years?**







**What are the chances of developing lung cancer for someone who smokes 2 packs of cigarettes every single day for 28 years?**

**16% chance of developing lung cancer.**





What are the chances of developing all types of cancer and/or heart disease from someone who consumed cooked vegetable oils every day for 28 years?





What are the chances of developing all types of cancer and or heart disease from someone who consumed cooked vegetable oils every day for 28 years?

**86% chance of developing cancer and or heart disease.**







# Dietary polyunsaturated fatty acids and cancers of the breast and colorectum: emerging evidence for their role as risk modifiers

Helmut Bartsch, Jagadeesan Nair, Robert Wyn Owen

*Carcinogenesis*, Volume 20, Issue 12, December 1999, Pages 2209–2218,

<https://doi.org/10.1093/carcin/20.12.2209>

**Published:** 01 December 1999    **Article history** ▼

**“Persistent oxidative stress, often involving enhanced peroxidation of PUFAs in cell membranes by intracellularly produced O – and N -centred free radicals, altered cellular redox potential, activation of protein kinases and subsequent changes in transcription factors, are now known to enhance the development of malignant diseases.”**

**“Thus, the carcinogenic process could be initiated and/or accelerated by lipid peroxidation-induced DNA and protein damage.”**

# Linoleic Acid Increases Lectin-Like Oxidized LDL Receptor-1 (LOX-1) Expression in Human Aortic Endothelial Cells

Fritz Maingrette<sup>1</sup> and Geneviève Renier<sup>2</sup>

 Author Affiliations

Address correspondence and reprint requests to Dr. Geneviève Renier, Notre-Dame Hospital, CHUM Research Centre, 3rd Floor, Y-3622, 1560 Sherbrooke East, Montreal, Quebec, Canada, H2L 4M1. E-mail: [genevieve.renier@umontreal.ca](mailto:genevieve.renier@umontreal.ca)

Diabetes 2005 May; 54(5): 1506-1513.  
<https://doi.org/10.2337/diabetes.54.5.1506>



This article shows that **linoleic acid increases endothelial dysfunction and inflammatory marker expression**. It also asserts that **diabetics have more linoleic acid in their LDL particles than nondiabetics**. It is an in vitro experiment.

➤ [J Biol Chem](#). 2015 Sep 18;290(38):23371-84. doi: 10.1074/jbc.M115.682195. Epub 2015 Aug 3.

# Excess Linoleic Acid Increases Collagen I/III Ratio and "Stiffens" the Heart Muscle Following High Fat Diets

Julianne Beam<sup>1</sup>, Amy Botta<sup>1</sup>, Jiayu Ye<sup>1</sup>, Hesham Soliman<sup>2</sup>, Brieanne J Matier<sup>1</sup>, Mary Forrest<sup>1</sup>, Kathleen M MacLeod<sup>3</sup>, Sanjoy Ghosh<sup>4</sup>

Affiliations + expand

PMID: 26240151 PMCID: [PMC4645600](#) DOI: [10.1074/jbc.M115.682195](#)

**Free PMC article**

**Corn oil diet induces changes to cardiac fatty acids and causes early diastolic dysfunction without altering systolic function** CO feeding led to a three-fold increase in cardiac LA over 5 weeks compared to OO fed hearts (Abbv. Corn Oil, Olive Oil, Linoleic Acid)





# Biochimica et Biophysica Acta (BBA) - Bioenergetics

Volume 1555, Issues 1–3, 10 September 2002, Pages 160–165



## Effects of fatty acids on mitochondria: implications for cell death

Daniele Penzo, Chiara Tagliapietra, Raffaele Colonna, Valeria Petronilli, Paolo Bernardi  

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[https://doi.org/10.1016/S0005-2728\(02\)00272-4](https://doi.org/10.1016/S0005-2728(02)00272-4)

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The mitochondria cannot use PUFA's for energy production anywhere near the way it can use it for monounsaturated fatty acids and saturated fatty acids. **PUFA'S = Cell Death**

What is the half life of linoleic acid in the body?

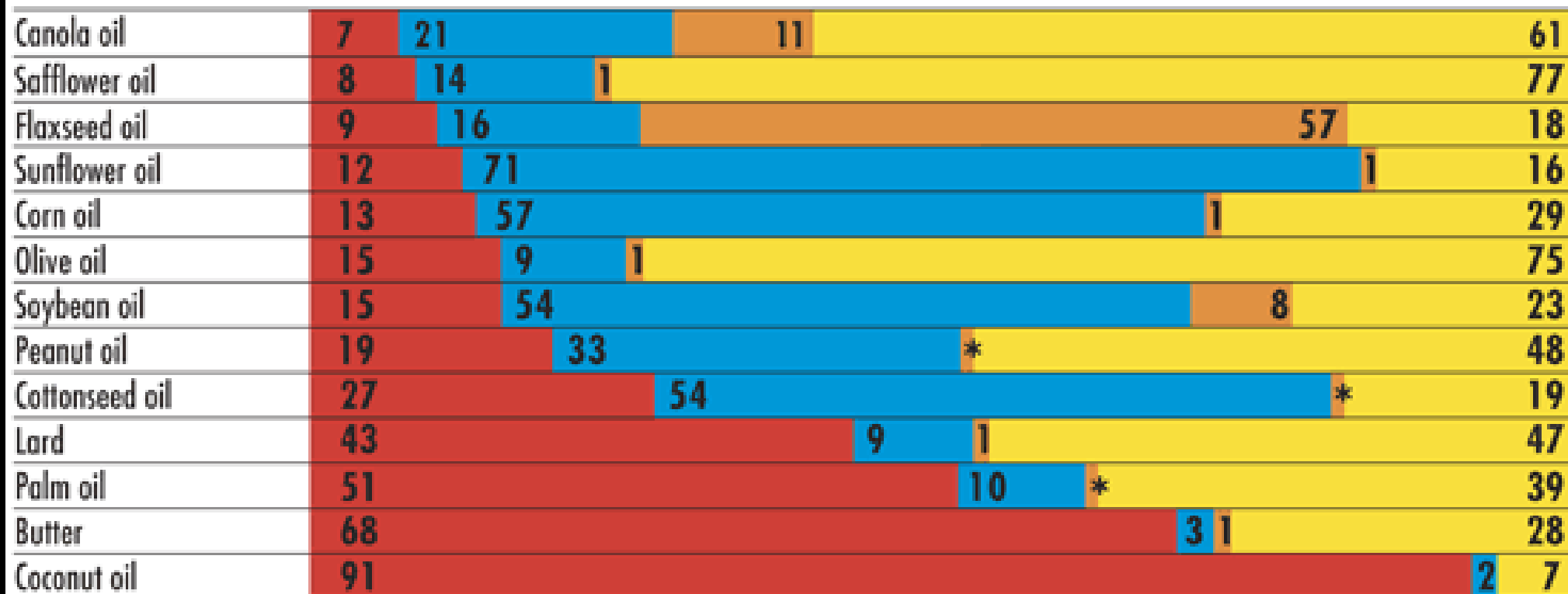
What is the half life of linoleic acid in the body?

Estimated to be two years!



# Comparison of Dietary Fats

## DIETARY FAT



SOURCE: POS PILOT PLANT CORPORATION

## SATURATED FAT



## POLYUNSATURATED FAT



linoleic acid  
(an omega-6 fatty acid)



alpha-linolenic acid  
(an omega-3 fatty acid)

## MONOUNSATURATED FAT



oleic acid  
(an omega-9 fatty acid)

Source: [https://en.wikipedia.org/wiki/File:Comparison\\_of\\_dietary\\_fat\\_composition.png](https://en.wikipedia.org/wiki/File:Comparison_of_dietary_fat_composition.png)

# The problem with unstable omega 6 fats

- Adulteration of oils
- Processed foods need long shelf life
- This process shuts down oxygen transfer so that the food doesn't smell rancid
- Eating adulterated omega 6 doesn't allow for proper oxygen transfer
- Overdoses of omega 3 Destabilized Cellular membranes



# Avoid the following oils



- Canola oil
- Corn oil
- Soybean oil
- Cottonseed oil
- Safflower oil
- Peanut oil
- Sunflower oil
- Grapeseed oil
- Fish oil
- Rice Bran Oil



# Replace vegetable oils with



- Olive Oil
- Avocado Oil
- Grass Fed Butter or Ghee
- Duck Fat
- Lard
- Coconut Oil
- Beef Tallow

# Bile: Liquid Gold





# Eat these bitters daily:



- ✓ **Ginger Root/Tea**
- ✓ **Dandelion Greens/Tea**
- ✓ **Artichokes (Bile Builder/Fiber)**
- ✓ **Organic Shade Grown Coffee**
- ✓ **Lemons/Limes**
- ✓ **Radishes**
- ✓ **Radicchio**
- ✓ **Cranberries**
- ✓ **Basil, Thyme, Rosemary (Smell these to stimulate stomach enzymes)**
- ✓ **Cilantro & Parsley**
- ✓ **Apple Cider Vinegar (Thins Bile)**



**KETO PRO TIP:** Remove spinach  
and almonds for 30 days.





# Replace almonds with



- Walnuts
- Pecans
- Brazil Nuts
- Pili Nuts
- Macadamia Nuts

# Replace spinach with



- Arugula
- Dandelion greens
- Broccoli
- Brussels Sprouts



**KETO PRO TIP:** Remove cow dairy for 30 days.



# Replace cow dairy with

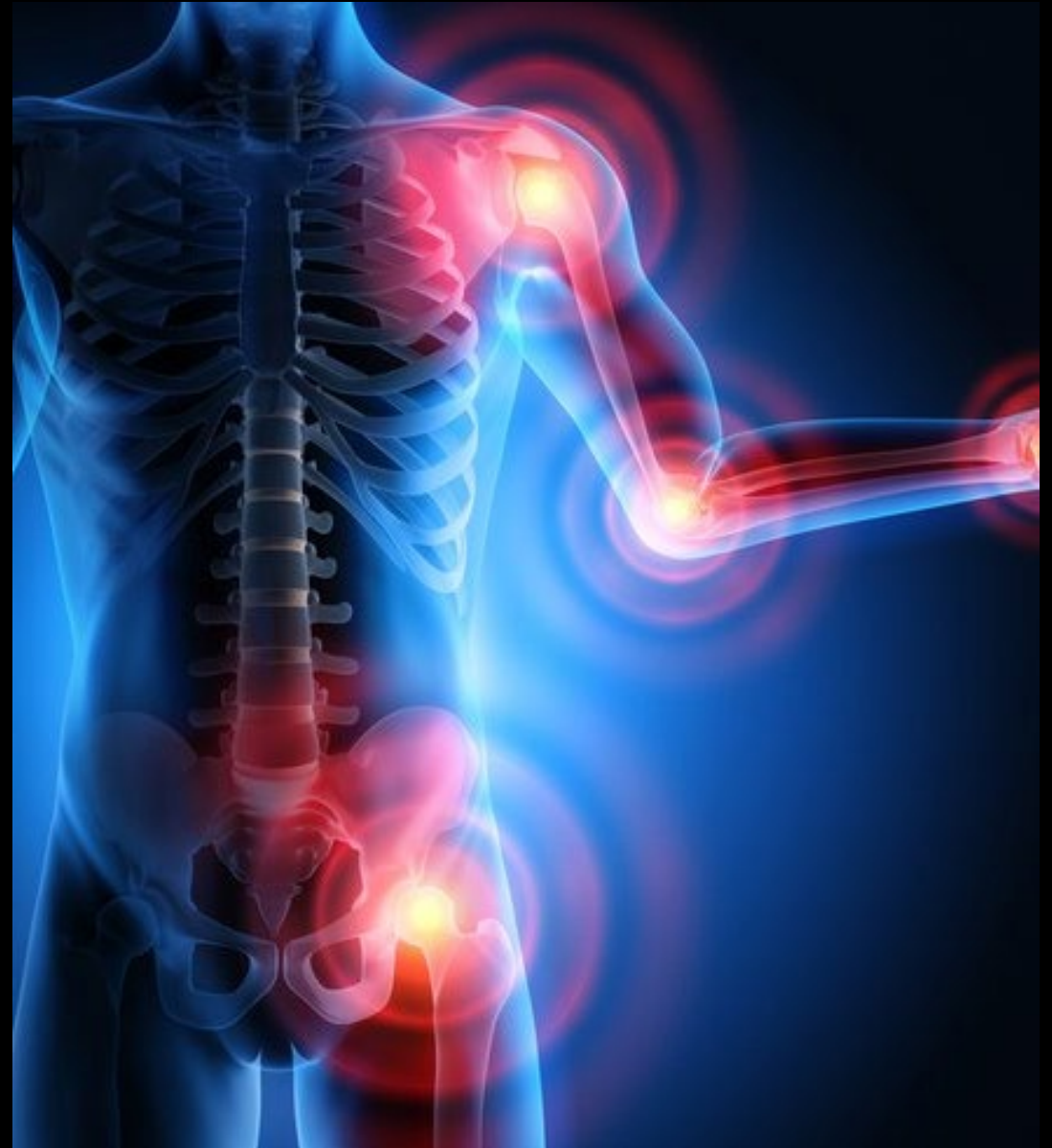


- Sheep cheese & milk
- Goat cheese & milk
- Macadamia nut milk
- Coconut milk



# Hidden sources of inflammation on keto:

- Legumes
- Corn
- Soy
- Burned/blackened meat
- Farmed fish
- Nightshades









# Avoid the following artificial sweeteners on keto:

- ❌ Maltitol
- ❌ Sorbitol
- ❌ Mannitol
- ❌ Aspartame
- ❌ Sucralose
- ❌ Saccharine
- ❌ Asesulfame potassium  
asesulfame



A human study on the pharmacokinetics of sucralose (how it moves through your system) accounted for only 96.7% of it; the other 3.3% was untraceable. Is it turning into an unusual metabolite or is it bioaccumulating somewhere in your body?





Study on 17 obese women showed that **sucralose increased glucose and insulin levels** following an oral glucose test. Other researchers, however, have not found these glycemic or insulinogenic effects.



A study, published in Nature, 2014, began by examining what happened to different groups of mice fed any of three different artificial sweeteners (saccharin, sucralose, and aspartame) as compared to mice fed normal sugars (glucose and sucrose). Worryingly, all of the mice that were fed the artificial sweeteners quickly developed glucose intolerance, a harbinger of diabetes, obesity, and metabolic disease.

> [Nature](#). 2014 Oct 9;514(7521):181-6. doi: 10.1038/nature13793. Epub 2014 Sep 17.

## Artificial sweeteners induce glucose intolerance by altering the gut microbiota

Jotham Suez <sup>1</sup>, Tal Korem <sup>2</sup>, David Zeevi <sup>2</sup>, Gili Zilberman-Schapira <sup>3</sup>, Christoph A Thaiss <sup>1</sup>, Ori Maza <sup>1</sup>, David Israeli <sup>4</sup>, Niv Zmora <sup>5</sup>, Shlomit Gilad <sup>6</sup>, Adina Weinberger <sup>7</sup>, Yael Kuperman <sup>8</sup>, Alon Harmelin <sup>8</sup>, Ilana Kolodkin-Gal <sup>9</sup>, Hagit Shapiro <sup>1</sup>, Zamir Halpern <sup>10</sup>, Eran Segal <sup>7</sup>, Eran Elinav <sup>1</sup>

Affiliations + expand

PMID: 25231862 DOI: [10.1038/nature13793](https://doi.org/10.1038/nature13793)

<https://pubmed.ncbi.nlm.nih.gov/25231862/>

- Splenda may cause weight gain.
- Splenda affects gut bacteria.
- Cooking with Splenda is dangerous.



<https://pubmed.ncbi.nlm.nih.gov/24944060/>  
<https://pubmed.ncbi.nlm.nih.gov/15111986/>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4056765/>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3856475/>  
<https://www.sciencedirect.com/science/article/abs/pii/S0308814609005378>



# Approved sweeteners on keto:

Swap artificial sweeteners out  
for these better options 🖱️

- ✓ Monk fruit
- ✓ Pure stevia
- ✓ Erythritol



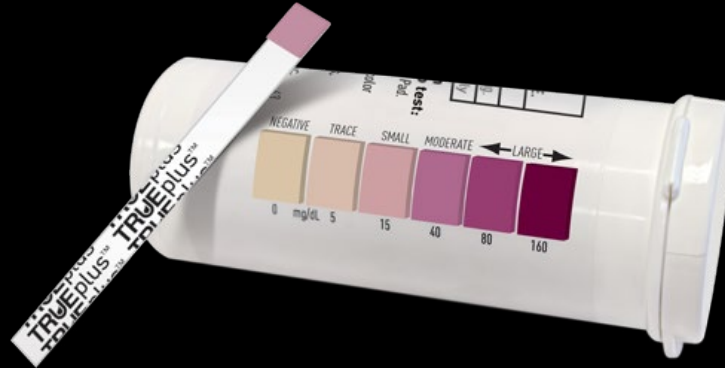
# How do you measure ketones?



# 3 ways to measure ketones in the body



**Beta Hydroxy Butyrate (BHB)**



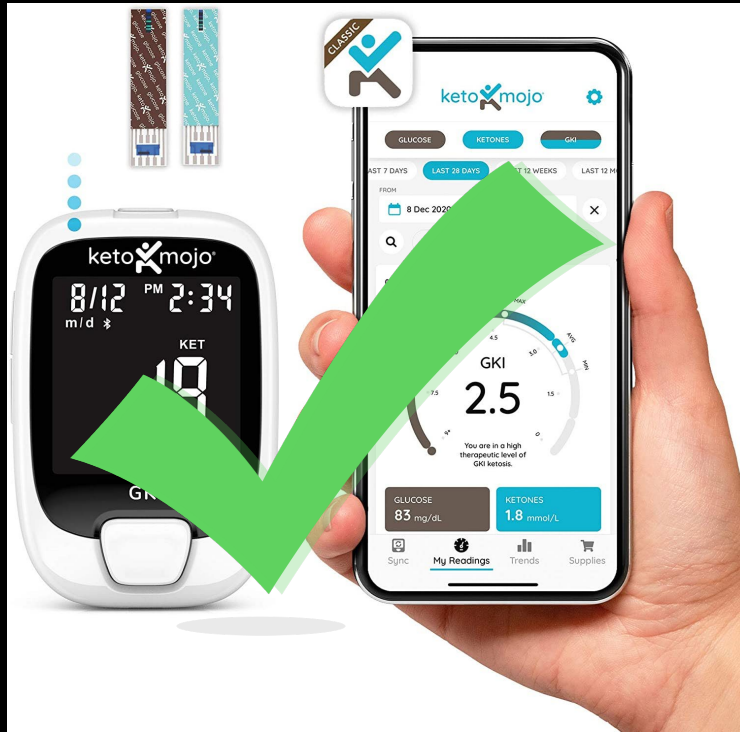
**Acetoacetate**



**Acetone**



# 3 ways to measure ketones in the body



**Beta Hydroxy Butyrate (BHB)**



**Acetoacetate**



**Acetone**

# Optimal blood glucose/ketones

- Fasted Blood Glucose: 70-90 mg/dL
- Blood Ketones: 0.8 – 2.8 mmol/L



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## Advanced Testing

### 1 Hour Post Prandial:

- Blood Ketones 0.8 – 2.8 mmol/L
- Blood Glucose: 120 mg/dL or below





# Optimal blood glucose/ketones

- Fasted Blood Glucose: 70-90 mg/dL
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## Advanced Testing

### 1 Hour Post Prandial:

- Blood Ketones 0.8 – 2.8 mmol/L
- Blood Glucose: 120 mg/dL or below

### 2 Hours Post Prandial:

- Blood Ketones 0.8 – 2.8 mmol/L
- Blood Glucose: 100 mg/dL or below



2 scientifically  
proven ways to  
enhance ketones





# Number 1: C8 Caprylic Acid



Current  
Developments in  
Nutrition

CDN



[Curr Dev Nutr.](#) 2017 Apr; 1(4): e000257.

Published online 2017 Mar 22. doi: [10.3945/cdn.116.000257](https://doi.org/10.3945/cdn.116.000257)

PMCID: PMC5998344

PMID: [29955698](https://pubmed.ncbi.nlm.nih.gov/29955698/)

**Tricaprylin Alone Increases Plasma Ketone Response More Than Coconut Oil or Other Medium-Chain Triglycerides: An Acute Crossover Study in Healthy Adults**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1573354/>  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6481320/>  
<https://academic.oup.com/cdn/article/1/4/e000257/4555134>





# Number 2: Caffeine stimulated ketone production

## Caffeine intake increases plasma ketones: an acute metabolic study in humans

**Authors:** [Camille Vandenberghe](#), [Valérie St-Pierre](#), [Alexandre Courchesne-Loyer](#), [Marie Hennebelle](#), [Christian-Alexandre Castellano](#), and [Stephane Cunnane](#) ✉ | [AUTHORS INFO & AFFILIATIONS](#)

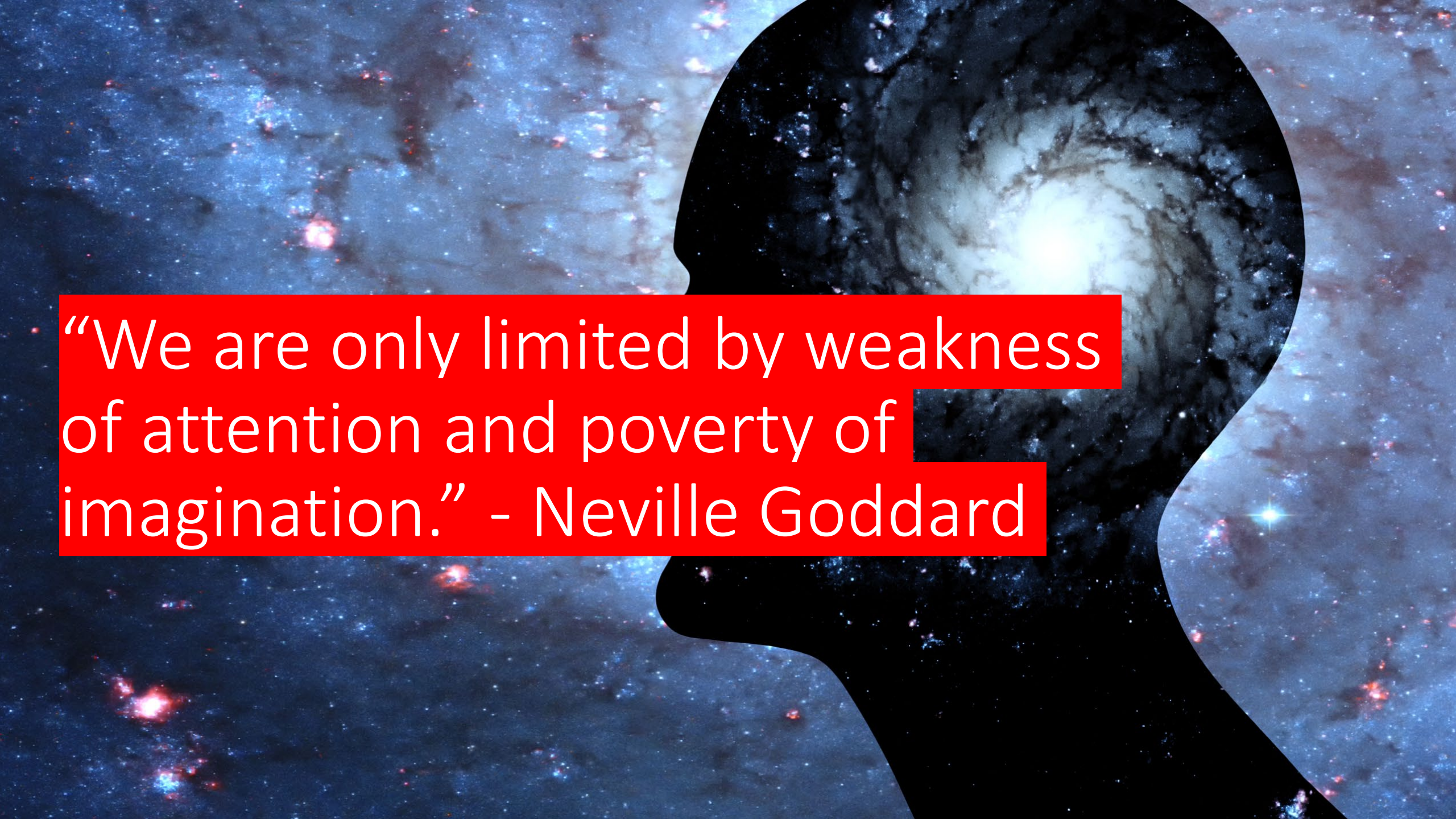
**Publication:** Canadian Journal of Physiology and Pharmacology • 25 November 2016 • <https://doi.org/10.1139/cjpp-2016-0338>

### Abstract

Brain glucose uptake declines during aging and is significantly impaired in Alzheimer's disease. Ketones are the main alternative brain fuel to glucose so they represent a potential approach to compensate for the brain glucose reduction. Caffeine is of interest as a potential ketogenic agent owing to its actions on lipolysis and lipid oxidation but whether it is ketogenic in humans is unknown. This study aimed to evaluate the acute ketogenic effect of 2 doses of caffeine (2.5; 5.0 mg/kg) in 10 healthy adults. Caffeine given at breakfast significantly stimulated ketone production in a dose-dependent manner (+88%; +116%) and also raised plasma free fatty acids. Whether caffeine has long-term ketogenic effects or could enhance the ketogenic effect of medium chain triglycerides remains to be determined.



Final Thoughts



“We are only limited by weakness  
of attention and poverty of  
imagination.” - Neville Goddard





How many of  
you talk to  
yourself during  
the day?



YOU ARE THE MOST  
INFLUENCIAL PERSON YOU'LL  
SPEAK TO TODAY



*Two percent  
of the people think,  
Three percent  
of the people  
Think they think,  
And ninety-five percent  
of the people would  
rather die than  
Think.*

- George Bernard Shaw

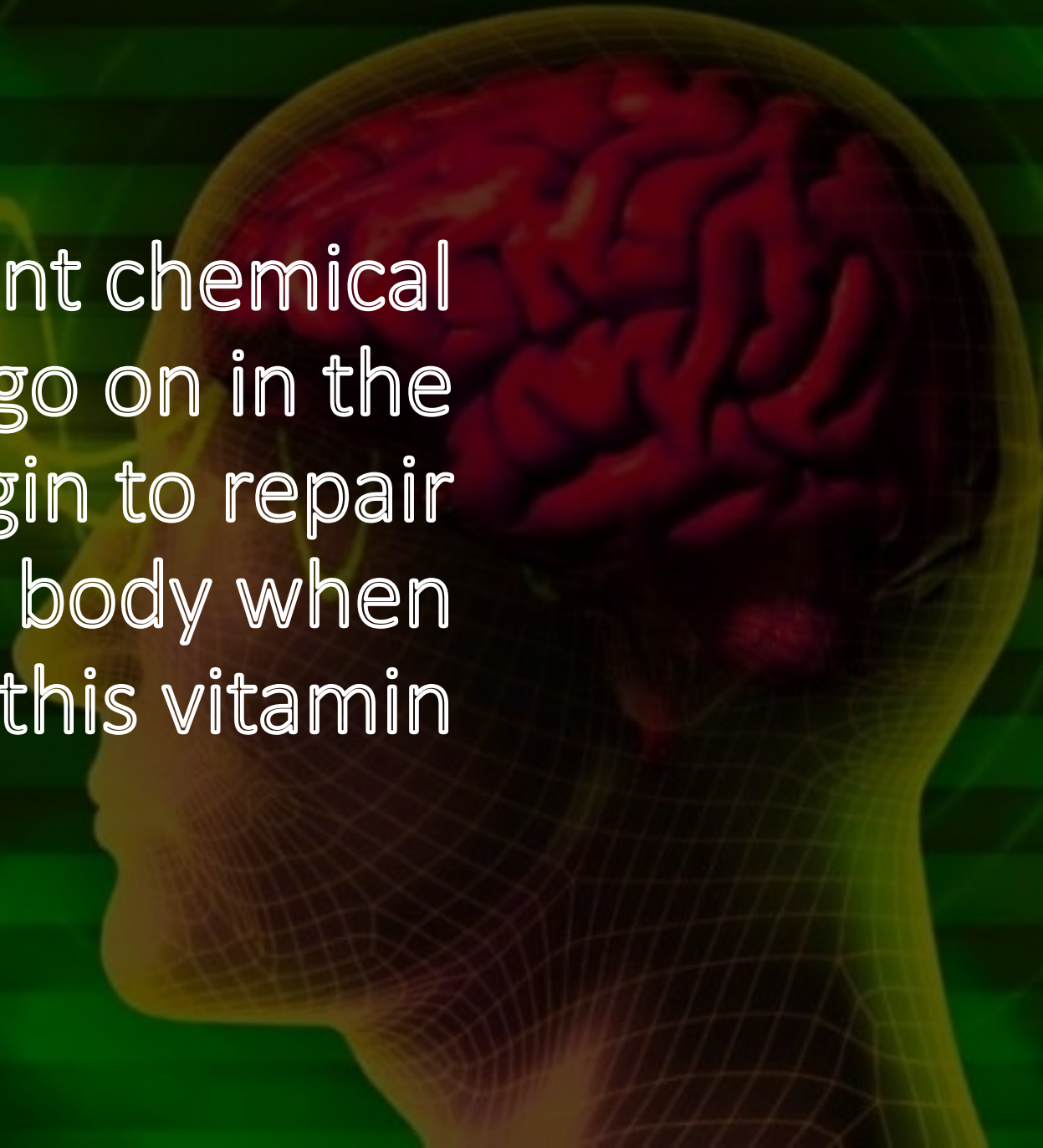


The  
Strongest  
Vitamin in  
the World  
is Vitamin G





1200 different chemical  
reactions that go on in the  
body that begin to repair  
and restore the body when  
you take this vitamin







**gratitude**

WHAT YOU  
APPRECIATE,  
APPRECIATES!



**— Thoughts —  
become things.**

**If you see it in your mind,  
you will hold it in your hand.**

**Bob Proctor**





# THANK YOU!

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