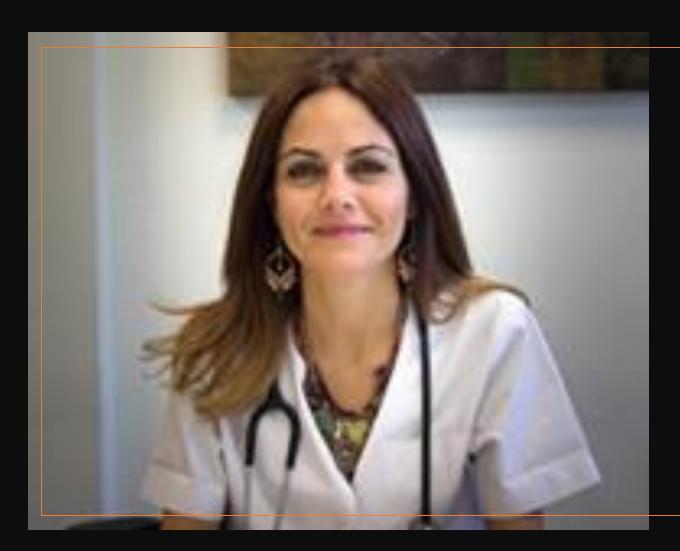
## FASTING FOR HEALING



Dra Camino Díaz www.dracaminodiaz.com consultas@dracaminodiaz.com



#### Dra Camino Díaz

M.D. – Universidad Complutense Madrid (Spain). General Practitioner and Specialist in Family Medicine and Integrative Medicine.

Expert in Therapeutic Fasting, Intestinal Microbiota, Orthomolecular Supplementation, Neural Therapy and Intradermal Acupuncture.

Double Master in Homeopathy Master's Degree in Evidence-Based Nutrition and Supplementation.

Master's Degree in Environmental Medicine.

Master's Degree in Advanced Integrative Medicine.

### **HEALTH CONDITIONERS:**

- METABOLIC SYNDROME
- OBESITY
- DIABETES
- HIPERTHENSION
- DYSLIPEMIA
- CHRONIC DEGENERATIVE DISEASES
- ARTERIOSCLEROSIS
- HART DISEASES
- ASTHMA
- DEPRESSION
- CANCER
- CHRONIC FATIGUE

- PREMATURE AGING
- NEURODEGENERATION
- ALZHEIMER
- PARKINSON

SILENT INFLAMM ATION MICROBIO ME AND GUT

DYSBIOSIS

- SIBO
- LEAKY GUT
- BLOATING
- FOOD SENSITIVES
- DIGESTIVE ISSUES
- HEADACHES, MIGRAINES
- CHRONIC FATIGUE
- SKIN PROBLEMS
- GASTROINTESTINAL DISEASES
- AUTOINMUNE DISEASES

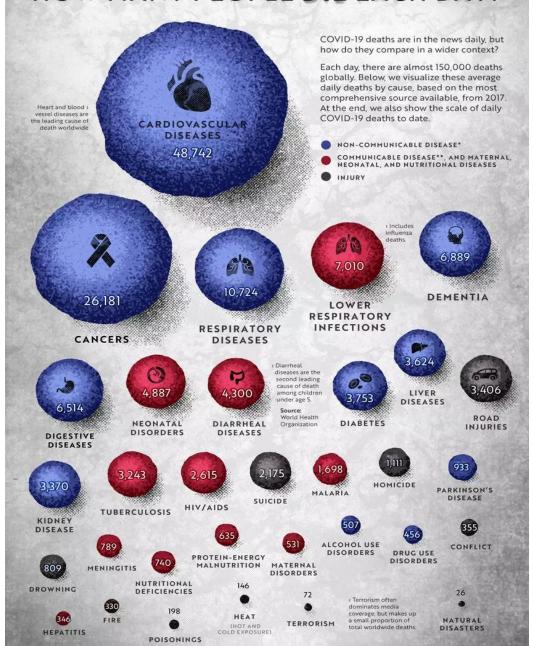
AGING
OXIDATIVE
STRESS

ENVIRON MENTAL DISEASES

- CHEMICAL SUBSTANCES
- TOXINS, XENOBIOTICS
- ENVIRONMENTAL ILLNESSES
- LIVER PHASES DETOXIFICATION



#### HOW MANY PEOPLE DIE EACH DAY?



Rank	Cause	<b>Daily Deaths</b>
#1	Cardiovascular diseases	48,742
#2	Cancers	26,181
#3	Respiratory diseases	10,724
#4	Lower respiratory infections	7,010
#5	Dementia	6,889
#6	Digestive diseases	6,514
#7	Neonatal disorders	4,887
#8	Diarrheal diseases	4,300
#9	Diabetes	3,753
#10	Liver diseases	3,624
	Total Daily Deaths	147,118

# NONCOMMUNICABLE DISEASES

Most NCDs are considered preventable because they are caused by modifiable risk factors.



#### Nine global NCD targets to be attained by 2025 (against a 2010 baseline)

A 25% relative reduction in risk of premature mortality from cardiovas cular disease, cancer, diabetes or chronic respiratory diseases

At least a 10% relative reduction in the harmful use of alcohol A 10% relative reduction in prevalence of insufficient physical activity A 25% relative reduction in prevalence of raised blood pressure, or contain the prevalence of raised blood pressure



















A 30% relative reduction in prevalence of current tobacco use

> Halt the rise in diabetes and obesity



A 30% relative reduction in mean population intake of salt/sodium

An 80% availability
of the affordable
basic technologies
and essential
medicines, including
generics, required to
treat NCDs

At least 50% of eligible people receive drug therapy and counselling to prevent heart attacks and strokes



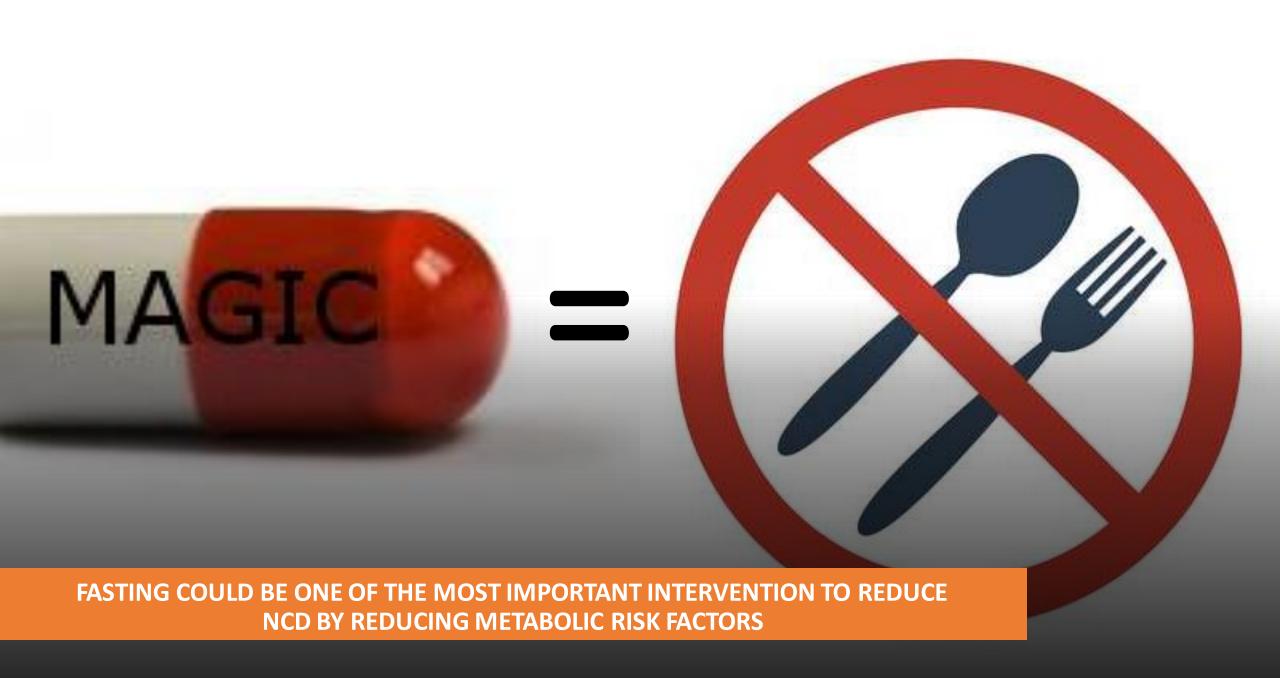




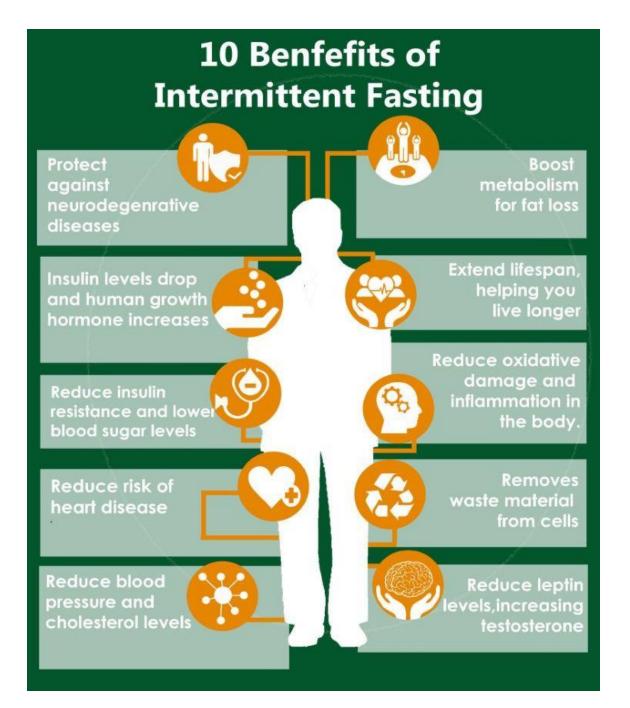
#### Factores de Riesgo comunes a las principales ECNT



Factor de Riesgo	Enfermedad Crónica No Transmisibles				
	Cardiovascular (Cardiaca, AVE, HTA)	Diabetes	Cáncer	Respiratoria (EPOC, Asma)	
Tabaquismo	*	*	*	*	
Consumo de Alcohol	*		*		
Nutrición	*	*	*	*	
Inactividad física	*	*	*	*	
Obesidad	*	*	*	*	
Presión Arterial elevada	*	*			
Glicemia	*	*	*		
Lípidos sanguíneos	*	*	*		





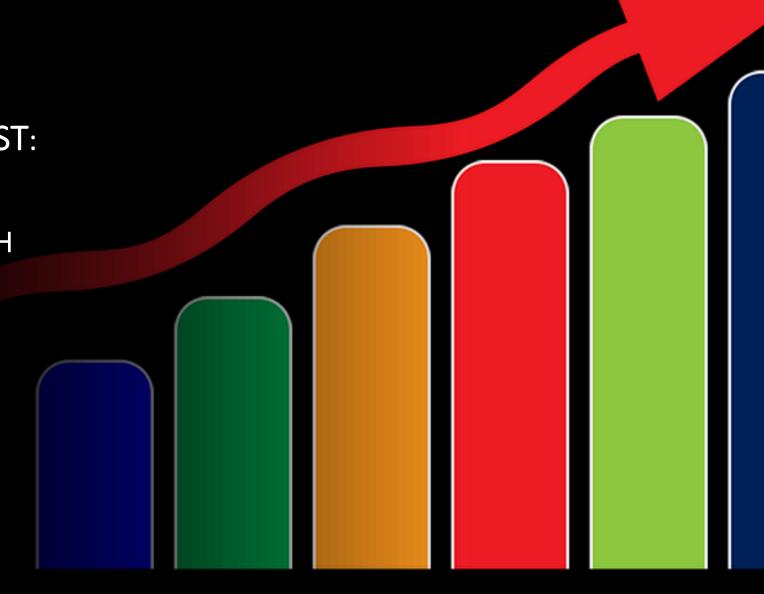




12-16 h: METABOLIC ADAPTATION, GH

16-18 h: AUTOPHAGY

2-4 d: STEM CELLS

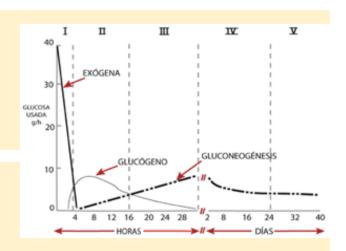


## THREE PHASES DURING FASTING

- I PHASE: glucose + glycogen
- II PHASE: fatty acids: ketogenesis-lipolysis
- III PHASE: essential proteins=starvation

(end of fasting)

**PHASE II** 



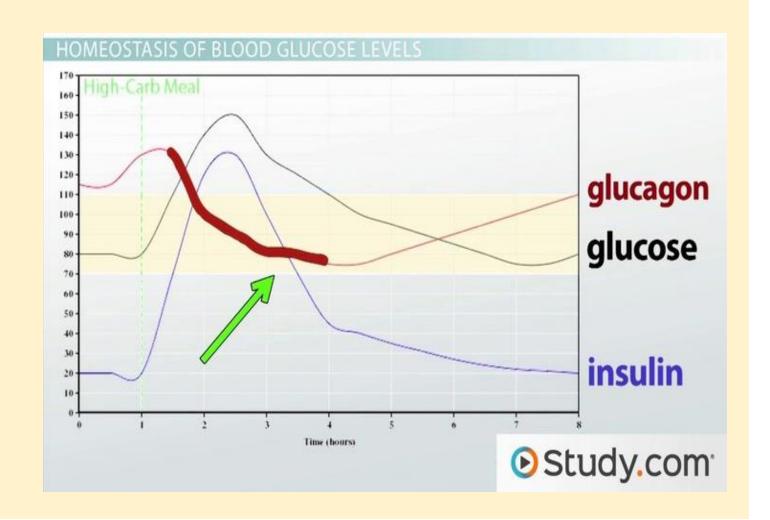
PHASE III

PHASE I

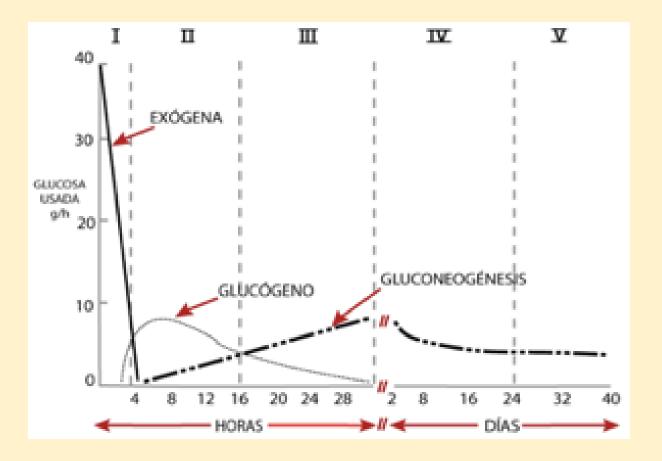
#### PHASE 1:

24-48 h consumming glucose/glycogen from liver and muscles:

- Lows insuline and blood sugar levels
- Increase glucagón
- Glycogenolisis
- Hepatic gluconeogenesis



#### Glucose Production by Liver During Fasting Conditions (Gluconeogenesis and Glycogenolysis) **Fasting State** Glockpen @ Parternal Decreased tempeting. Conser Photolog call PARTY Citychensi Armino-O BOOK IS mond. Liver Gluconeogenesis Glycogenolysis to or other thycogen **Decreased** grucese Maintains glucose in bloodstream



#### **PHASE II:**

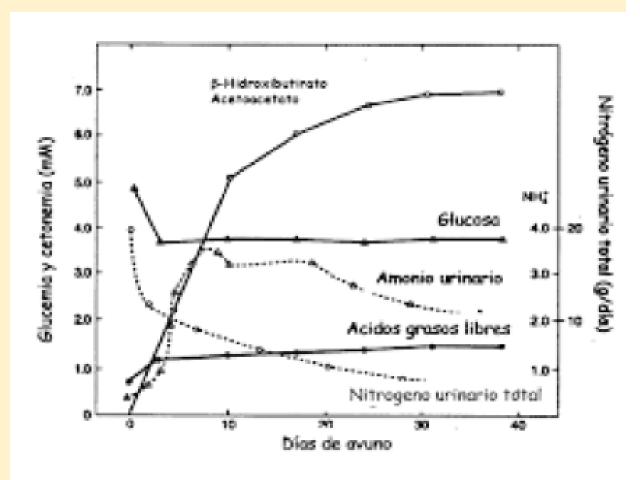
30-40 day (aprox): KETOGENESIS

During fast there is an upregulation of the ketogenic pathway and an increased production of ketone bodies.

Ketogenesis is a metabolic pathway that produces ketone bodies, which provide an alternative form of energy for the body.

Ketogenesis produces acetone, acetoacetate, and betahydroxybutyrate molecules by breaking down fatty acids.

**PHASE III:** end of fasting. Consumming esential proteins. Risk of oedema or anasarca.



### **HOW FASTING HEALS:**

- REDUCES BLOOD SUGAR AND INSULINE LEVELS
- REDUCE INSULINE RESISTANCE
- REGULATES INFLAMATION
- CONTROL ADICTION TO FOOD
- REDUCE BODY FAT
- WEIGHT LOSS
- CONTROL DIABETES
- REDUCE HIPERTHENSION

SILENT INFLAM MATION MICROBIO ME

AND GUT DYSBIOSIS

- GIVES A BRAKE TO DIGESTIVE SISTEM.
- REDUCES BACTERIAL GROWTH

• INCREASE SIRTUINS

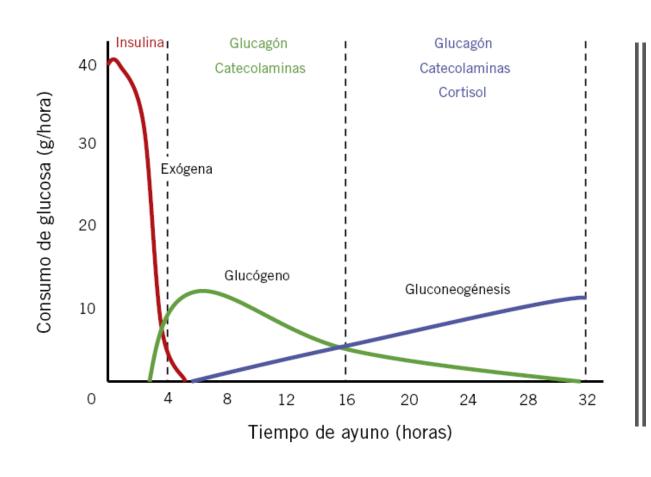
- INCREASE AMPK
- ACTIVATES AUTOPHAGY
- REDUCE OXIDATIVE STRESS
- IMPROVE BRAIN FUNCTION
- INCREASE NEUROTROPHIC FACTOR ACTIVITY AND NEUROGENESIS

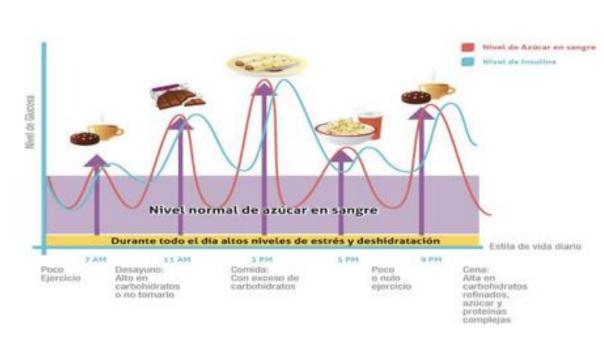
AGING
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ENVIRON MENTAL ILLNESSES

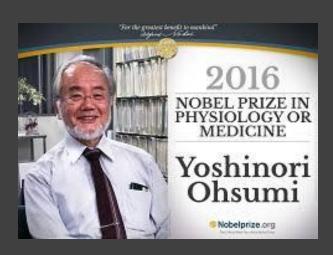
 GIVES A BRAKE OF ARTIFICIAL FOOD ADDITIVES

# 1º Metabolic flexibility and Reduce Low Grade Inflamation



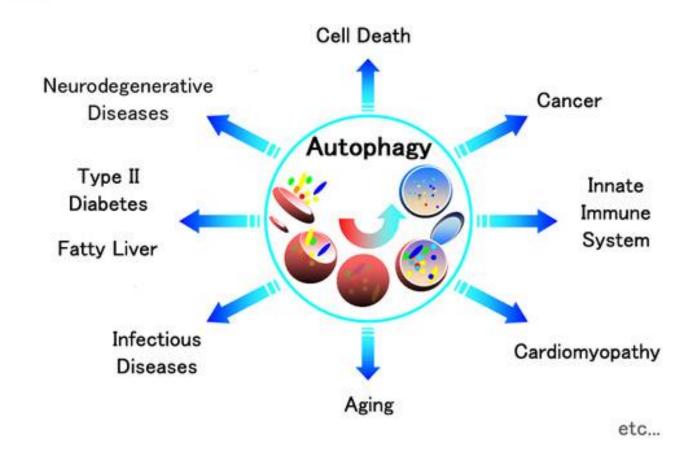


## 2º Activates AUTOPHAGY



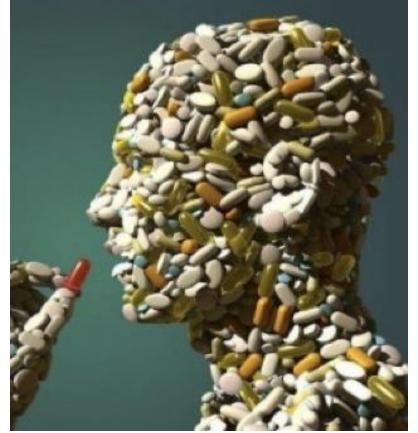


#### Pathological and Physiological Functions of Autophagy

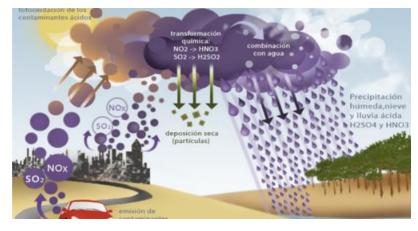




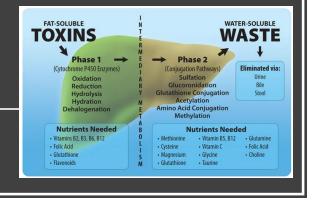




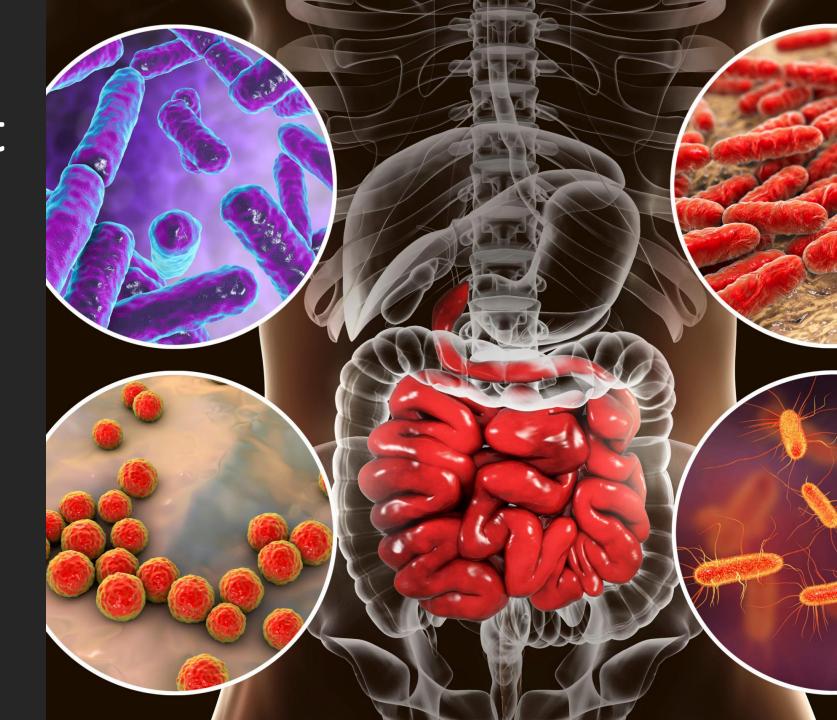




3º Clears toxins



4º Gives your gut a brake and remodelates gut microbiome



# HOW TO FAST:



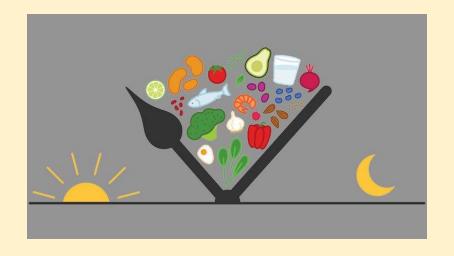
#### **TYPES OF FASTING:**

Prolonged fasting (0-40 days)



#### Intermitent fasting:

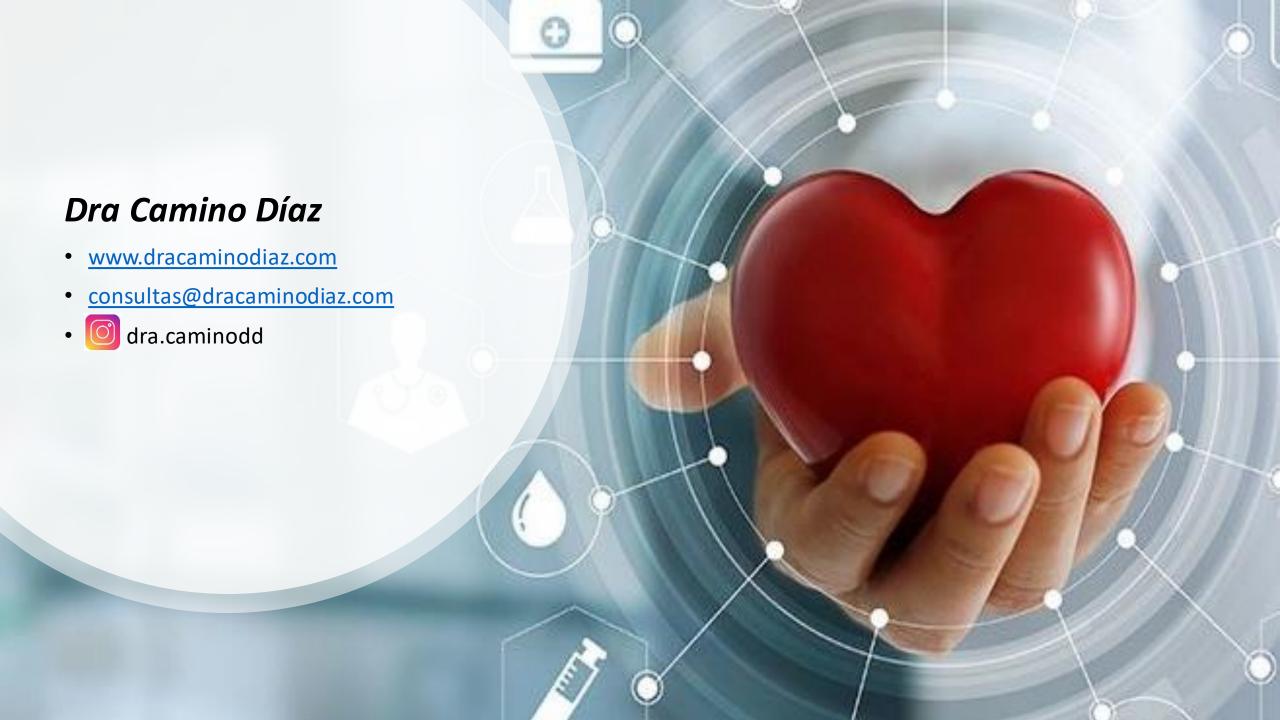
- 12:12
- 16:8
- 5:2
- Eat-stop-eat
- Alternate day fasting
- Fasting Mimicking Diet



# Who should not fast?

- Children, teenagers
- Pregnant/breastfeeding women
- Eating disorders (anorexia/bulimia)
- Dyabetes type 1 and advanced diabetes
- Liver or renal insufficiency
- People underweight/frail/elderly

 For prolonged fasting its recommended to consult a doctor experted in fasting!



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