ENDOTOXEMIA IS MODULATED BY QUANTITY AND QUALITY OF DIETARY FAT IN OLDER ADULTS

AUTHORS: Lopez-Moreno et al.'s

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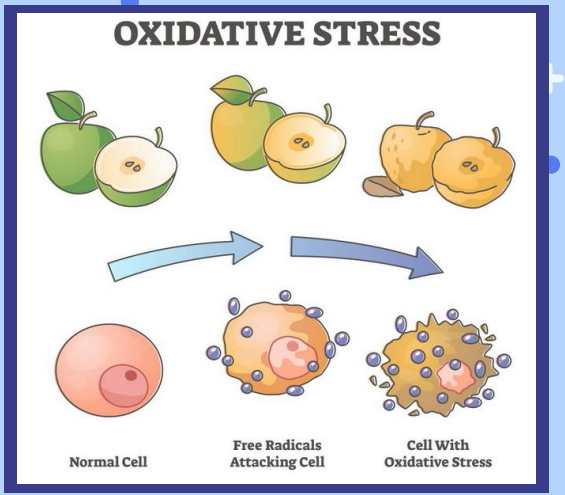
BACKGROUND INFORMATION

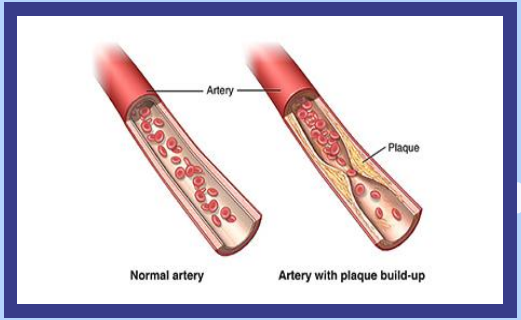
The Primary factor is the process of aging that associate with atherosclerosis

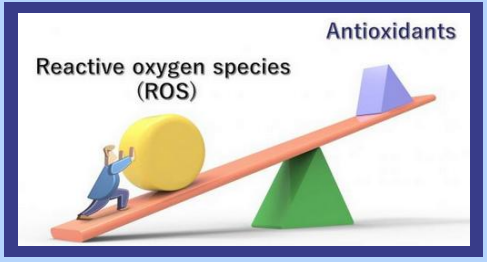
These modifications are associated with inflammation due to oxidative which has dietary roots.

An eating plan on dietary fat, can help to lessen the inflammatory reaction that occurs after meals.

The Experimental Gerontology suggest that intestinal fat absorption may facilitate the absorption of endotoxins linked to the post prandial inflammatory response.





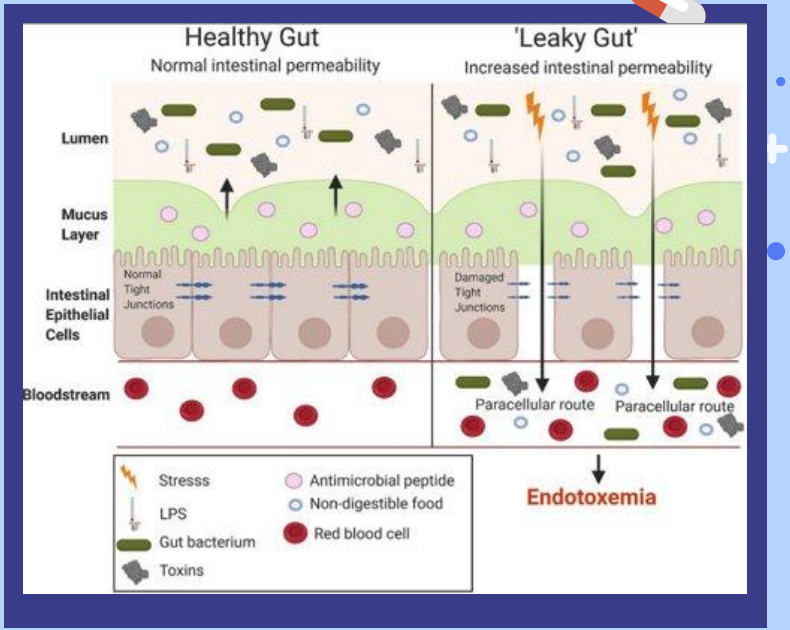


Robson Hidalgo

PURPOSE

- In this study, healthy older individuals were measured to endotoxemia in order to better understand how dietary fat affects this condition.

- The objective is to evaluate the effects of the consumption of three diets with different quantities and qualities of fat of postprandial and fasting plasma LPS in elderly people.



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RESEARCH QUESTION

In healthy older adults, how are fasting and post-meal levels of lipopolysaccharide (LPS) and LPS-binding protein (LBP) affected by various dietary fat compositions, such as a Mediterranean diet rich in monounsaturated fats (MUFA), a diet high in saturated fats (SFA), and a low-fat, high-carbohydrate diet rich in n-3 polyunsaturated fats (PUFA)?

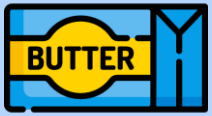
Ramon Polanco

CROSSOVER DESIGN STUDY

In this design, the twenty healthy older adults were randomized to three different diets, each lasting three weeks. These diets were:

GROUP 1

A Mediterranean diet



GROUP 2

An SFA-rich diet

GROUP 3

A low-fat high-carbohydrate diet

WHY A CROSSOVER DESIGN?

A crossover design study is a study done over time in which subjects receive a sequence of different treatments.

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SPECIFIC REQUIREMENTS

RECRUITMENT & CONSENT

HEALTH ASSESSMENT

LIFESTYLE MAINTENANCE

DATA COLLECTION

MEDICAL CONDITION

MEAL CHALLENGE

DIETARY MONITORING

BLINDING

Chelsea Tejada

WHO IS OUR POPULATION?

20 PARTICIPANTS

Elderly 10 males and 10 females

INCLUSION CRITERIA

High Blood Pressure, Hyperlipidemia, Diabetes Mellitus

EXCLUSION CRITERIA

No Smoking and No High Alcohol Consumption No History of Cardiovascular Disease

DEMOGRAPHICS

Average age of 67.1
Average BMI of 31.9kg/m^2

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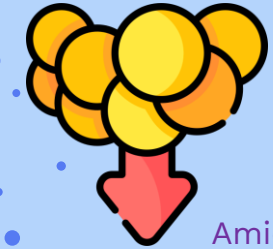
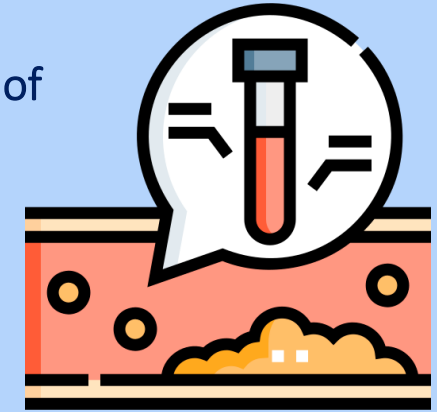
RESULTS OF STUDY

- The fasting LPS levels showed a significant decrease in the Carbohydrate Polysaturated fat diet group compared to people consuming the SFA and Mediterranean food diet.
- There were no significant differences found in the fasting LBP levels within all dietary groups studied.
- Postprandial LBP levels decreased significantly after the intake of carbohydrate Polysaturated fat meal.





LIMITATIONS

CASE STUDY DURATION

COMPLIANCE FOR ASSIGNED DIET

DIETARY AVAILABILITY

STUDY ONLY COVERS OLDER ADULTS

ETHNICITY BIASED

SAMPLE SIZE

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