





OLIVES TO LIVE

FARMACEUTICALS?

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October 2018



Today's discussion

- Cinderella of the industry
- How can we increase awareness?
- You are pivotal
- Let's make us healthy again
 - with natural, raw, fermented products

We are what we eat

- Food is information
- We get to choose the information we give our bodies
- Too often the **information** is **inflammation**
- Type of calories - nutrient-rich vs empty calories

U.S. FOOD CONSUMPTION AS A % OF CALORIES

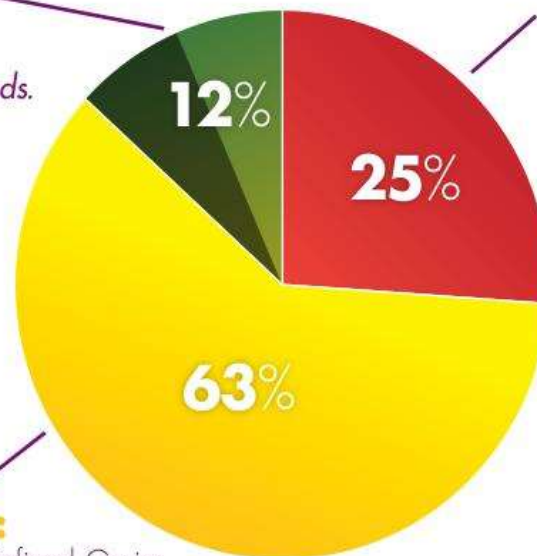
PLANT FOOD:

Vegetables, Fruits, Legumes,
Nuts & Seeds, Whole Grains
Fiber is only found in plant foods.

NOTE: Up to half of this category may be processed, for example almonds in candy bars, apples in apple pies or spinach in frozen spinach soufflé, and of course these would not be healthy choices. The focus should be on whole unprocessed vegetables, fruits, legumes, nuts and seeds and whole grains.

PROCESSED FOOD:

Added Fats & Oils, Sugars, Refined Grains



ANIMAL FOOD:

Meat, Dairy, Eggs, Fish, Seafood
Cholesterol is only found in animal foods. Animal foods are the **PRIMARY** source of saturated fat.

GUIDE TO HEALTHY EATING:

Much easier to understand than the USDA Food Pyramid, with no food industry influence.

Eat **LESS** from the animal and processed food groups and **MORE** whole foods from the plant food group.

In general, food from the animal and processed food group contribute to disease, while **WHOLE** foods from the plant group contribute to good health.

- Self-destruction is made to be socially acceptable

Role of Food Fermentation

- Functional microorganisms **transform** the chemical constituents of raw materials of plant/animal sources during food fermentation, thereby enhancing the **bioavailability** of nutrients, enriching **sensory qualities**, imparting **bio-preservative** effects and improvement of food safety, **degrading toxic** components and anti-nutritive factors, producing **antioxidant and antimicrobial** compounds, stimulating **probiotic** functions and **fortifying** some health-promoting bioactive compounds.

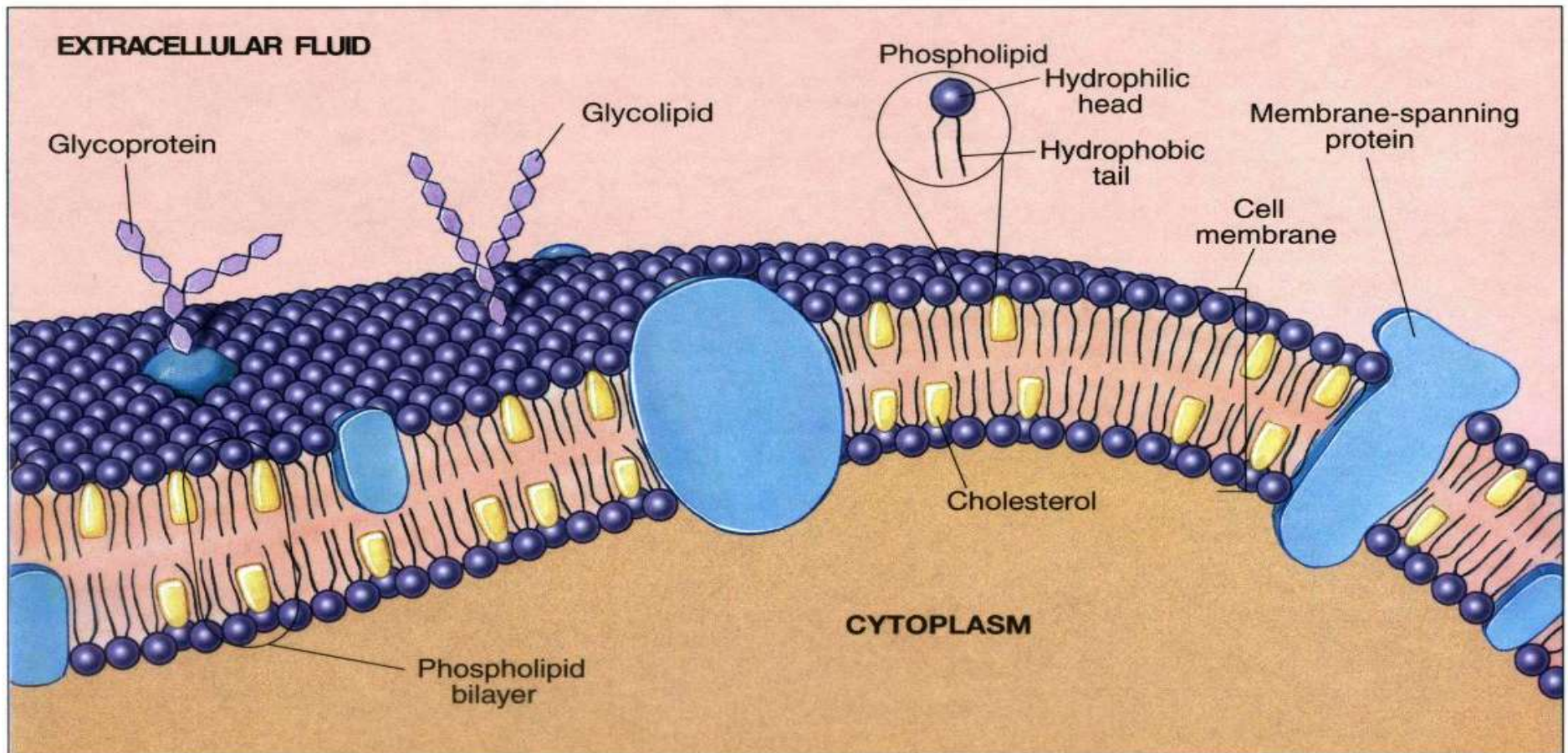
Components of Fresh Olive Fruit

- water 65 –72%
- lipids
- simple sugars
- polysaccharides
- proteins and amino acids
- Fibre – pectins
- organic acids
- biophenols
- vitamins
- pigments
- inorganic compounds (potassium, calcium, magnesium, phosphorus)

Lipids – Saponifiable Fraction

- Healthy fat (Saponifiable fraction)
 - Brain is 80% fat
 - Heart
 - Stomach – suppresses gastric acid secretion, protects lining
 - GIT – regulates pancreatic and bile secretions, reduces motility

THE CELL MEMBRANE



Role of the non-saponifiable fraction

- Non-saponifiable fraction – 1.5 – 2 % - highly bioactive – fundamental to specific character of the oil – oxidative stability, flavour and colour
- Recent data increasingly suggests a far greater role in disease prevention

BIOPHENOLS

“Biophenols” - first coined by Romeo & Uccella (1996) to denote bioactive phenols in olives and olive oil, replacing the more common and less chemically accurate term “polyphenols”

Hassan K Obied

Biophenols

- Foods rich in biophenols contain hundreds of other phytonutrients – synergy where the total benefit is > the sum of the parts
- Overriding phytoprotectant effect is free radical scavenging
- Tyrosol, hydroxytyrosol, vanillic acid, caffeic acid, etc
- Aglycones
- Flavones (luteolin)
- Lignans (pinoresinol)

Besides Biophenols

- Carotenoids: Lutein, β -carotene
- Vitamin E
- β -sitosterol and squalene
- Oleocanthal
- Maslinic acid
- Ursolic acid
- Oleanolic acid

Orchestra

- A symphony or a cacophony?
- Myriad of micronutrients ensure that the benefit is far greater than the sum of the parts - raw fermented products play a major role
- We – including our gut biome - are interactive with our environment
- Diversity in the microbiome is vital – and consistent maintenance

Role of Probiotics

- As much bacterial DNA in our bodies as human
- Biome is dependent on our diet – it is our choice
- We are dependent on the biome for:
 - immunity
 - sense of well-being (tryptophan – serotonin)
 - gut-brain link
 - how we see and interact with the world

Role of Probiotics

- Biome is an orchestra within the big orchestra
- Need to be in the correct environment
- Diversity is key
- Role of sugar
- Role of antibiotics
- Role of glyphosate
- Biome needs to be appreciated and cared for every day

Butyrate – short chain fatty acid (aka ketone bodies)

- Olive biophenols have been demonstrated to modulate the colonic bacteria populations – resulting in the production of short chain fatty acids – especially butyrate.
- Butyrate can only be produced by the gut bacteria in the colon if there is **fibre** to support these bacteria
- Butyrate has been shown to have critical essential functions – especially as it is the link in the Gut-Brain paradigm



What does all this mean?

- Components of table olives are amazingly beneficial
- Lack of awareness regarding the probiotic benefits
- *Lactobacillus plantarum*
- *Lactococcus*, *Enterococcus*, *Pediococcus*,
Leuconostoc, *Bifidobacterium*
- No need to add or manipulate
- Together with the fibre, probiotics can transform

In Conclusion

- Table Olives can be recognised for their true worth
- Starts with us – setting an example
- When we understand and take responsibility for making the best product possible
- We can increase health benefit awareness
- And help to make our world healthy again

» THANK YOU VERY MUCH