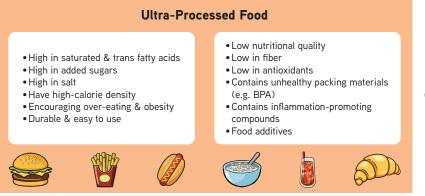
Why are ultra-processed foods and drinks bad for us?

Ultra-processed foods (UPF) and drinks are characterized by:

- Low nutritional quality, high energy density
- Contain high amounts of saturated fatty acids and high-fructose corn syrup
- Undergoing multiple industrial processes to create the final product, some create harmful compounds to Human health
- Contains additives that may be harmful
- Due to its plastic or can packing, upf contains endocrine-disrupting chemicals (EDCs) that may be harmful to human health



Steatotic Liver Disease Obesity Diabetes Heart Disease

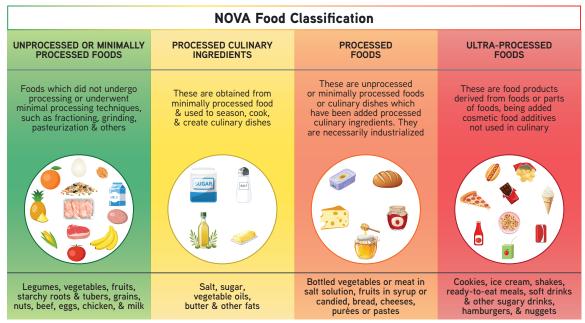
Adopted from Grinshpan LS. et al., JHEP Reports, 2024

High UPF consumption is associated with cardiovascular diseases, cancer, metabolic syndrome, type-2 diabetes, obesity, steatotic liver disease, & all-cause mortality

What is the practical way to identify if a product is ultra-processed?

UPF contains characteristic ingredients of no or rare culinary use in your kitchen, for example:

- Hydrolyzed proteins
- Fructose, high-fructose corn syrup
- Hydrogenated oil
- "Cosmetic additives" flavors, colors, emulsifiers
- Palm oil
- UPF tends to be high in energy, salt, sugars and fat
- UPF is usually very easy to use, ready to eat/heat, durable, & hyper-palatable
- UPF is usually packed in plastics and cans
- The ingredients list of the UPF product usually contains more than 5 ingredients



Adopted from Oliveira P., Frontiers in Nutrition, 2022

How can you help your patients to reduce their UPF consumption?

- Emphasize the importance of drinking water and reduction of sugar sweetened beverage consumption
- Encourage to consume minimal or unprocessed foods in meals and/or as snacks (e.g., vegetables, fruits, natural yogurt, nuts, eggs, legumes, unprocessed fish & poultry)
- Educate on how to interpret food labeling

