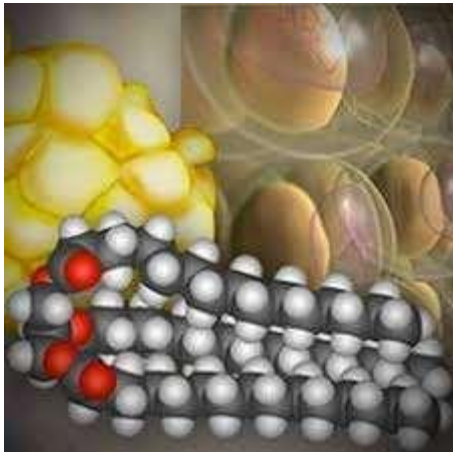


FATS AND OIL

INTRODUCTION-

Any of a group of natural esters of glycerol and various fatty acids, which are solid at room temperature and are the main constituents of animal and vegetable fat



VEGETABLE FAT

Vegetable oils, or vegetable fats, are oils extracted from seeds or from other parts of fruits. Like animal fats, vegetable fats are mixtures of triglycerides

ANIMAL FAT

Animal fats and oils are lipids derived from animals: oils are liquid at room temperature, and fats are solid. Chemically, both fats and oils are composed of triglycerides.

Difference between fat & oil

Fat	Oil
1. Remains solid at room temperature	1. Remains liquid at room temperature
2. Relatively more saturated	2. Relatively more unsaturated
3. Relatively higher melting point	3. Low melting point
4. More stable	4. Less stable

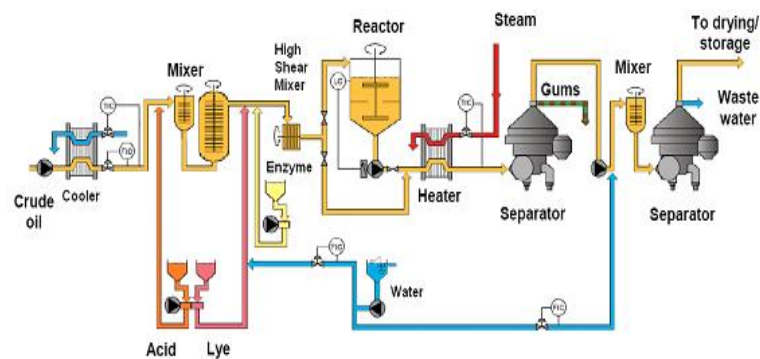
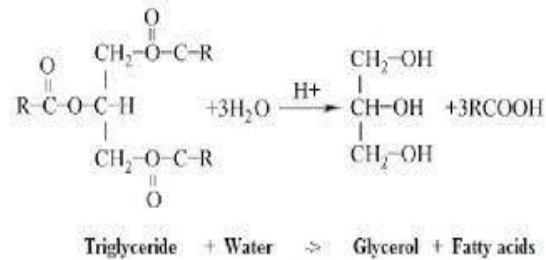


VEGETABLE FAT AND ANIMAL FAT

CHEMICAL REACTION OF FAT AND OIL

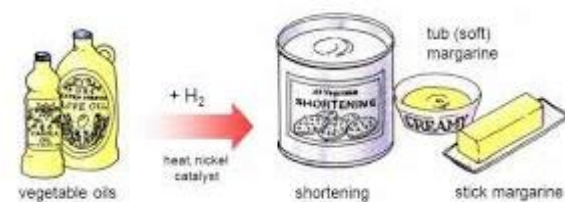
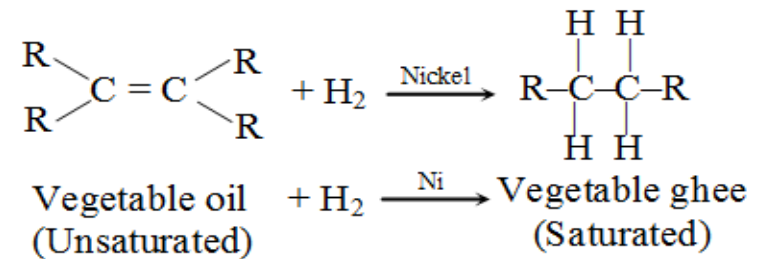
1. HYDROLYSIS

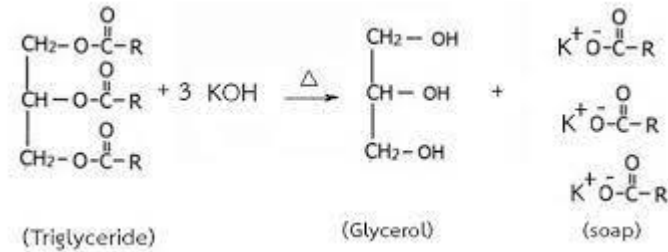
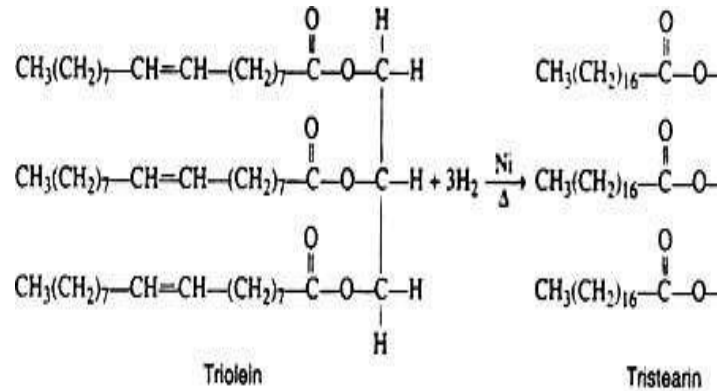
Sodium hydroxide causes hydrolysis of fats and its result in cleavage of ester linkage of fats to give glycerol and sodium salts of long chain fatty acid known as soap.



2. HYDROGENATION

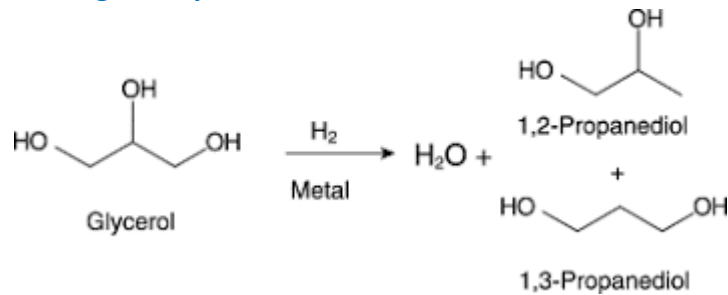
By hydrogenation unsaturated part of oil get reduced into saturated part and hence liquid oil get converted into semisolid fat.





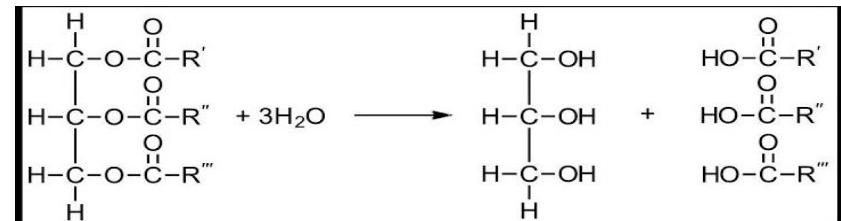
3. HYDROGENOLYSIS –

In this reaction fats or oil get splits up into glycerol and heigher aliphatic alcohol.



5. RANCIDIFICATION-

Long storage and it contact with air moisture and sunlight oil and fats undergo decomposition and start smelling Unpleasnt



4. SAPONIFICATION-

Saponification is a process by which triglycerides are reacted with sodium or potassium hydroxide (lye) to produce glycerol and a fatty acid salt called "soap"



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&hl=en-
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3MBHceRDBUQ_AUoAHoECAEQAA](https://www.google.com/search?q=fats+and+oils&source=lmns&bih=600&biw=1366&hl=en-US&sa=X&ved=2ahUKEwj1M6rh970AhX903MBHceRDBUQ_AUoAHoECAEQAA)

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II

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