* **Glycerides:-**

There are three general acylglycerols occur,

1- **Monoglyceride:-** consist of **one**, **fatty acid** esterified to glycerol.

2- **Diglyceride:-** consist of, **two**, **fatty acids** esterified to glycerol.

**Monoglyceride and diglyceride** are metabolic intermediates; they are normally present in small amounts.

**3-Triglycerides**

Depending on their fatty acid compositions, **Triglyceride** mixtures are referred to as **fats** or **oils**.

**Fats**:-

which are **solid** at room temperature, contain a large proportion of **saturated fatty acids**.

* **Oils:-**are **liquid** at room temperature; contain a large proportion of **unsaturated fatty .**

**Waxes:**

Waxes are esters of **long-chain** **fatty acid** (having 16 to 36 carbon atoms) **and a long chain monohydroxy alcohols** (having 16 to 30 carbon atoms). Their melting points (60 to 100 °C) are generally higher than those of triglycerides. Waxes are solid at room temperature, owing to their molecular weight.

Waxes also serve a range of other functions in nature, related to their properties and their firm consistency. Water repellent ,the shiny leaves of holly, poison ivy, and many tropical plants are coated with a layer of waxes, which protects against parasites and prevents excessive evaporation of water.

Beeswax, carnauba wax (from a Brazilian palm tree), are widely used in the manufacture of lotions, ointments, and polishes.

**Example: Myricylpalmitate (Bees wax):** It is an ester of **palmitic acid** with the alcohol **Myricyl .**



**Hydrolysis of triacylglycerol:**

Ester bonds of triacylglycerols can be hydrolyzed by acid, base, or lipase enzyme to obtain fatty acids and glycerol.

