The general formula of a fat can be written as:

H<sub>2</sub>C − OH

R¹COOCH₂	R <sup>1</sup> , R <sup>2</sup> and R <sup>3</sup> are alkyl groups. They can be the same or different.
	They can be saturated (only single C-C bonds) or unsaturated
R²COOCH	(double C=C or triple C to C bonds).
R³COOCH₂	Fats with many unsaturated fatty acids tend to have lower boiling points. They are usually liquid at room temperature, so are called oils.

CH<sub>3</sub>(CH<sub>2</sub>)<sub>16</sub>COOCH<sub>2</sub>

The sodium salts (soaps) may be converted to free fatty acids by adding a strong acid such as HCI. The  $H^{+}$  ions replace the  $Na^{+}$  ions.