

## INTRODUCTION

Fatty acids are long chain hydrocarbons containing a carboxyl group at one end and a methyl group at other. The chain length varies from 3 (Propionic acid) to 24 [Lignoric acid], but majority of fatty acids found in hydrogenated vegetable or animal oils are around C<sub>10</sub>-C<sub>20</sub> in length.

### STEARIC ACID [CH<sub>3</sub>(CH<sub>2</sub>)<sub>16</sub>COOH]

Stearic acid (Octadecanoic acid) is the highest molecular weight saturated fatty acid, occurring abundantly in natural fats and oils. Stearic acid being saturated has no double bonds between carbon atoms. This means the hydrocarbon chain is flexible and can roll up into a ball or stretch out in to a long zig zag.

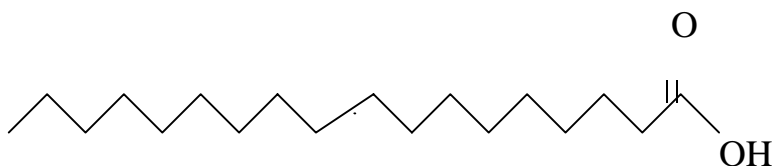


Fig 1.1 Stearic Acid