

* Most abundant protein in whole biosphere (RUBISCO)
 n n n n animal $\rightarrow$ COLLAGEN

LIPIDS (water insolubals)

① simple lipid $\Rightarrow$ Fatty Acid $R - COOH$
 $\downarrow$
 $[C_2-20]$ $[C_1-C_{19}]$ $\downarrow$
 $CH_3 / CH_3CH_2 \dots C_{19}$

* Fatty Acid 2 type

Saturated FA (No bond (=))

eg = Palmitic FA (16-C) = $CH_3(CH_2)_{14}COOH$

Stearic Acid (18-C) = $CH_3(CH_2)_{16}COOH$

Unsaturated FA (UFA)
 (one double bond)

mono UFA (MUFA)
 (one double bond)

Poly UFA (PUFA)
 (2 or > 2 double bonds)

Essential FA
 (body can't make it)
 eg - Linoleic, Linolenic

② simple lipid $\Rightarrow$ Glycerol
 $\begin{array}{c} CH_2OH \\ | \\ CHOH \\ | \\ CH_2OH \end{array}$ (Trihydroxy Propane)

③ many lipids have both FA and Glycerol

* Glycerol is esterified with FA

* monoglyceride, Di and Triglycerides

* ester bond made Alcohol and Acid next

