

- ✦ Needed for growth, development, tissue repair and maintenance. They play important role in glucose metabolism.
- ✦ 15 – 20% of total caloric consumption per day should be from dietary proteins.

Types of proteins

I. First class proteins (high biological value – have almost complete essential aminoacids)

- Non vegetarian: egg, mutton, chicken, fish, pork
- Vegetarian: milk, curd, paneer

II. Second class proteins (low biological value – some aminoacids lacking)

Soyabeans, Grams, Dhal, Pear, Beans, Nuts (dry fruits)

III. Third class proteins

Cereals – oats, barley, ragi, wheat, rice

Fat Contents

- Daily diet should have about 30gms of fats amounting to 15-25% of total calories

FOOD	CHOLESTEROL mg/100gm	FOOD	CHOLESTEROL mg/100gm
Egg yolk (dried)	3000	Lamb (raw)	70
Egg yolk (frozen)	1280	Pork	70
Brains raw	2000	Mutton	70
Egg (whole)	550	Chicken	60
Kidney, Liver	375	Ice Cream	45
Butter	250	Butter 1 table spoon	35
Cheese	100	Whole milk 1 cup	35
Beef	70	Skimmed milk 1 cup	05
Fish	70	Egg white	00

Know About

1. Saturated Fatty Acids (SFA)

- ✦ Solids at room temperature
- ✦ Mainly animal source – meat, milk, ghee, butter, cheese, vanaspathy, coconut oil.

2. Unsaturated Fatty Acids (UFA)

- ✦ Usually vegetable source, liquid at room temperature
 - Polyunsaturated FA (PUFA)
 - Monounsaturated FA (MUFA)
- ✦ SFA increase blood cholesterol,
- ✦ PUFA decreases total and LDL cholesterol
Excess PUFA likely to promote carcinogenesis, suppresses immune system & decreases HDL-C
- ✦ MUFA – lowers LDL without decreasing in HDL-C

3. P/S value

- ✦ Ratio of PUFA to SFA
- ✦ P/S > 2 decreases total cholesterol

Oil (unhydrogenated)

P/S value	
Safflower	8 : 1
Sunflower	6 : 1
Corn	5 : 1
Soya Bean	4 : 1
Olive	0.6 : 1
Butter	1 : 17
Coconut Oil	1 : 48
Palm Oil	1 : 53

4. What are Transfats?

- ✦ Transfats formed when vegetable oils are processed (more solid solid – hydrogenated form)
- ✦ Raises LDL cholesterol and lowers HDL-C same like SFA

5. Is fish oil good for health?

- ✦ Yes, it contains Eicaspentanoic acid and decosohexaenoic acid which reduces CAD risk by lowering lipids particularly Triglycerides and VLDL / LDL.
- ✦ They also lower BP, prolong platelet aggregation.