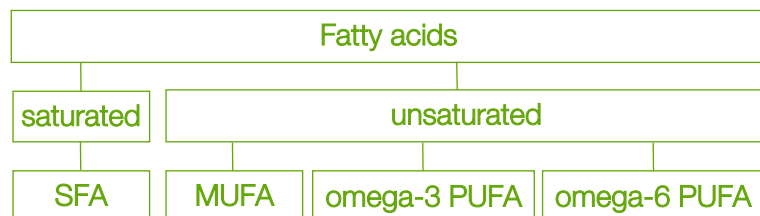


FATS: THE FACTS

What is fat?

Fat is made of fatty acids, which are carbon chains of different lengths “covered” with hydrogen atoms.



	No. of double bonds on carbon chain	Oxidative Stability	Food Sources
Saturated fatty acids (SFA)	0	Good	Meat, milk, palm and coconut oil
Monounsaturated fatty acids (MUFA)	1	Low	Avocados, olive oil, sesame oil, high oleic seed oils
Polyunsaturated fatty acids (PUFA)	2 or more	Low	<i>Omega-3</i> —sunflower, soybean and corn oil <i>Omega-6</i> —soybean oils, walnuts, almonds, seafood

Benefits of essential fatty acids



Linoleic and alpha-linolenic acids are needed for normal growth and development of children.



Linoleic and alpha-linolenic acids contribute to the maintenance of normal blood cholesterol levels.



DHA and EPA contribute to the maintenance of normal blood triglyceride levels, normal blood pressure and normal function of the heart.



DHA contributes to the maintenance of normal visual and brain function.

DHA— docosahexaenoic acid

EPA— eicosapentaenoic acid



Fat controversies

Can fat lead to weight gain?

Fat, being energy dense at 9kcal/g, was previously thought to be associated with weight gain. However, high fat Mediterranean diet of olive oil or nuts, with no calorie restriction, did not lead to higher weight gain than a diet with reduced dietary fats. This supports the advice of not restricting healthy fats for weight management.

Does saturated fat increase risk to cardiovascular disease?

From observational studies, there is no evidence of association between SFA intake and cardiovascular risk. However, interventional studies where SFA were decreased and replaced with PUFA found a small reduction in risk. Thus, it is not enough to just decrease SFA consumption, but it is important to know what to replace it with.

What are the health effects of trans fat?

Trans fats raise the LDL-C (“bad” cholesterol), decrease the levels of HDL (“good cholesterol”) and increase risk to cardiovascular disease.

Fat Recommendation

World Health Organization recommends limiting fat intake to:

Total fat: 20-35% total energy

Saturated fat: less than 10% total energy

Trans fat: less 1% total energy

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