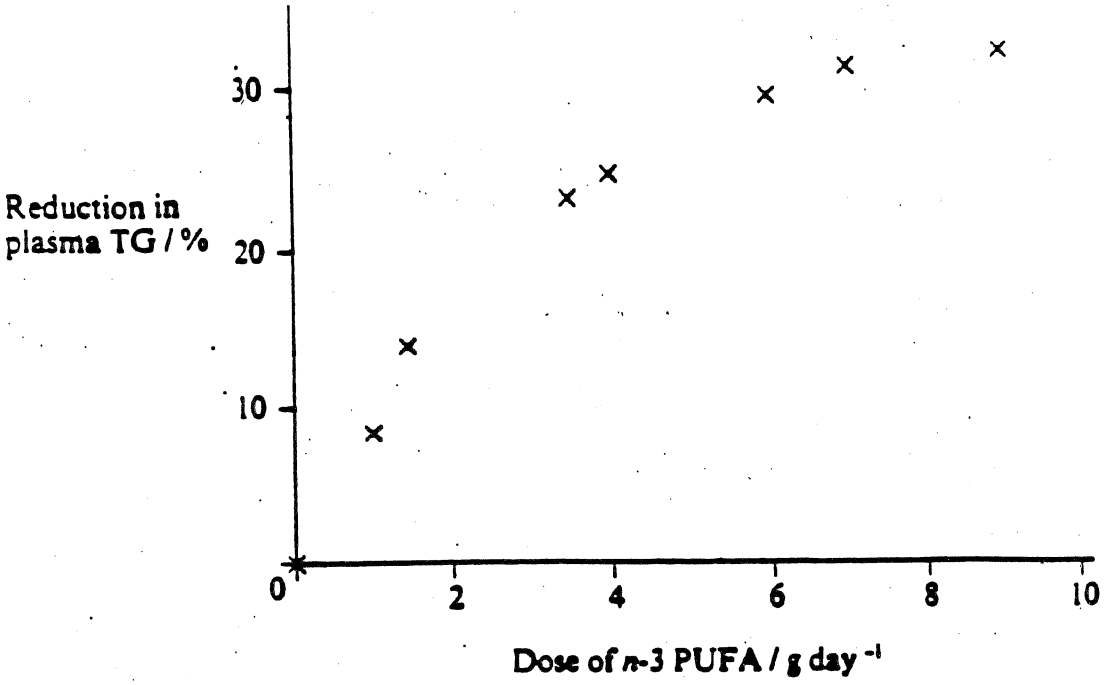
Name _____
Period _____ Date _____

Substances known as *n*-3 polyunsaturated fatty acids (PUFA) are found in oily fish such as mackerel. A trial was done to test the effects of *n*-3 polyunsaturated fatty acids on plasma triglycerides (TG) in the blood. The graph shows the results of the trial.



1. Using only the data in the graph, outline the effect of *n*-3 polyunsaturated fatty acids on levels of triglycerides in the blood. [3]

2. Explain two reasons for attempting to reduce levels of fat (TG) in the blood. [2]

The table below lists the nutrient content of several foods, as well as the recommended dietary allowance (RDA) for a 60 kg adult female (National Health and Medical Council of Australia). The quality of different foods may be compared according to the percentage of the RDA of particular nutrients that they supply. Excellent sources of a nutrient provide more than 15% of the RDA per average serving. Good sources provide 10-15% and moderate sources provide 5-10%.

Vit C Vit A

Food (average serving)	Protein /g	Fat /g	Energy /kJ	Ascorbic acid /mg	Retinal /mg	Iron /mg	Dietary fibre /g
Beef (120 g)	11	11	1070	0	0	4.3	0
Potatoes (90 g)	0	0	300	10	0	.6	0
Carrots (60 g)	0	0	92	3	765	0	2
Green beans (60 g)	0	0	80	3	38	0.4	2
Tuna fish (100 g)	25	3	560	0	0	2.5	0
Soya beans (200 g)	22	11	1090	0	0	5.5	9
RDA	45	-	8400	30	750	5-7	-

3. Calculate, according to the definition above, which foods are excellent sources of named vitamins. [3]

4. Determine which food provides the greatest amount of energy per gram. [2]

5. Suggest one reason for the high energy content of this food. [2]