THE LIPID PARAMETERS OF HEALTHY VOLUNTEERS

Palm oil is a widely used food substrate in our diet. We studied the effect of different varieties of palm oil (Refining Bleached Deodenized [RBD] and Shortening) available in the market on the lipid parameters of 60 healthy volunteers over a period of 2 months. The volunteers (who were in a closed community) had their diet rationed and closely monitored. They were divided into 3 groups according to their age (group A: age 20-29; Group B: age 30-39 and Group C: ages 40 and over). Each group received 70 g of RBD for 1 month in their diet followed by 70 g of Shortening in the second month. Lipid profile, liver and renal functions were obtained each month for every group. Results: We found that there was a significant decrease in the level of the cholesterol in all age groups, with a significant decrease in the level of LDL irrespective of which type of palm oil was used. As regards the HDL, there was a significant increase in its level with the use of RBD, while the use of Shortening resulted in a significant decrease in HDL. The triglyceride level increased significantly with the use of both types of palm oil in group C, and increased with the use of RBD all 3 groups. There was no significant change in the level of the liver enzymes or the kidney functions. Conclusion: Palm oil may have an advantage over other types of oils present in the market, in that it decreases the level of total cholesterol and LDL, it has variable effects on the HDL level and triglycerides.