

## Not All Fats Are the Same, With Special Reference to Dairy and Cardiovascular Disease

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### Abstract

Raised LDL cholesterol and triglyceride levels, reduced HDL cholesterol levels and high blood pressure are known risk factors for cardiovascular disease (CVD). In addition, lifestyle-related factors such as obesity, inactivity and smoking also appear to contribute to the risk. Intervention strategies for the prevention and treatment of CVD should focus on addressing all cardiometabolic risk factors, with a special focus on lowering LDL cholesterol and blood pressure. The intake of saturated fatty acids (SFA's) generally results in an increase in LDL cholesterol, which increases the risk of atherosclerotic components. Current recommendations are to limit the dietary intake of SFA's to less than 10% of total energy. As dairy fat contains up to 60% SFA's, dietary guidelines recommend the use of low-fat dairy to reduce saturated fat intake. These guidelines are being challenged for not being evidence-based.

Studies have yielded varying results regarding the effect of dairy intake on risk for cardiovascular disease. Some of the factors that may influence the findings of these studies will be discussed, including the specific dairy product (with an emphasis on cheese), type of fat, duration of intake, dose-response effect, level of food processing, influence on inflammation, presence of probiotics, advantages of fermentation and the synergistic effect of the food matrix.

Available evidence points to the fact that the type and source of dairy has a stronger influence on CVD risk than the total intake of dairy or a single nutrient in dairy. In healthy individuals, total dairy consumption of up to 200g per day, irrespective of the fat content is not associated with any harmful effects. Emphasis should also be placed on consumption of fermented foods.

A food-based dietary approach considering the effect of the overall diet on health rather than focusing only on the effect of individual nutrients is recommended to prevent non-communicable diseases. This will acknowledge that interactions occur between nutrients in food and that the cumulative effects are more pronounced than that of individual nutrients.

### PRESENTER BIOGRAPHY: RENÉE BLAAUW

Prof Renée Blaauw, PhD (Nutritional Sciences) is a Professor in Therapeutic Nutrition at the Division of Human Nutrition, Stellenbosch University, South Africa. She is a registered dietitian with the Health Professions Council of South Africa. She is a Past Chairperson of the Professional Board for Dietetics in South Africa, a Past President of SASPEN and an honorary member of both SASPEN and ADSA. She is currently serving as the Scientific Secretary of SASPEN. Her main research interests include Nutrition support of critically ill patients; Nutritional management of gastro-intestinal diseases and Hospital malnutrition. To this effect she is a member of the GLIM (Global Leadership Initiative on Malnutrition) working group and endeavours to contribute to the evidence-base regarding adult hospital malnutrition in South Africa. She is actively involved in teaching and training in dietetics, with a passion for mentoring. She strives to fulfil her educational philosophy "To stimulate, create interest and empower others to help themselves".