

FAT FACTS FOR A HEALTHY LIFE

Forty years of research is overturning the idea that saturated fats in the diet represent an independent health risk to humans. It's really just a question of balance.

For a long time, dietary cholesterol and saturated fats were perceived as major causal factors in cardiovascular diseases. To combat these diseases, we were advised to reduce our blood cholesterol – and the lower the better. But, long-term follow-up studies performed in the West and elsewhere have conclusively demonstrated that those with higher blood cholesterol live longer. So how can this be?

OUR CHANGING DIET

It all goes back to our genes and their expression, which is controlled by essential nutrients in our diet. The human genome was established a couple of million years ago in a wild environment. Among the nutrients essential to the expression of our genes are trace elements referred to as minerals, vitamins, amino-acids and fatty acids. Should a shortage or imbalance in one of these essential nutrients continue for some time, a person will fall sick.

In nature, essential fatty acids are distributed evenly and the omega-6:omega-3 ratio is around 1:1. This was true two million years ago and it still is today.

Unfortunately, modern diets have deviated from this fatty acid ratio and are now characterised by lopsided ratios of omega-6 to omega-3. Today, there is between 10 and 20 times as much omega-6 in our diet as omega-3. On the positive side, a return to a balanced ratio of essential fatty acids in the diet may be all it takes to turn an atherogenic diet into a healthy one.

A HEALTHIER BALANCE

The Columbus[®] Concept promotes a return to a healthier ratio of fatty acid in the human diet, specifically a 1:1 ratio of omega-6 and omega-3. The Columbus Concept does not advocate any other amendments to the otherwise well-established modern dietary guidelines.

The Columbus Concept has held three annual international scientific meetings and released common statements, which are available at www.columbus-concept.com. Products launched under the Columbus Concept banner include animal-derived products, such as eggs, milk and meat, as well as plant-derived products, such as oil and bread. These products are similar in appearance, taste and stability to their

standard modern counterparts, yet they differ substantially in their fatty acid ratios and the way they influence human blood lipids and the risk of degenerative diseases. For example, Columbus Concept eggs outperformed expectations in a number of clinical parameters classically presented as cardiovascular risks. For example, they seem to:

- › Leave plasma total cholesterol unaffected
- › Trigger a beneficial redistribution between LDL- and HDL-cholesterol
- › Significantly reduce blood triglycerides
- › Substantially reduce fasting insulin and glycemia
- › Effectively reduce systolic blood pressure
- › Improve anthropometric parameters (weight, waist and hip parameters)
- › Reduce pro-inflammatory indexes (CRP, LDL-cholesterol ester and the omega-6:omega-3 ratio)
- › Help FH-children with their statin treatment

In tests, these effects were observed in a wide range of patients (phenotypes): FH-children (between 9 and 15 years of age), healthy university students (between 18 and 32) and post-menopausal women (between 45 and 55). It seems that Columbus Concept foods are safe staple foods for the majority of people and that they may often help improve human health by modifying the modern diet to one more appropriate to man's genetic heritage. ■

Author and company profile

Dr Fabien De Meester is the president and CEO of the Belgian family-owned company Belovo SA. The company specialises in the fractionation of eggs into value-added ingredients for the food, cosmetic and pharmaceutical industries. In addition, the company has pioneered the Columbus Concept, a programme that promotes and sustains a return to the balance of fatty acids and healthy cholesterol associated with the 'wild' diets of our ancestors.