

## Heart-Healthy Buttery Spread

Brandeis University



Diets high in the wrong kinds of fats, especially trans fats, can lead to serious health problems such as high LDL (“bad”) cholesterol levels, cardiovascular disease, and diabetes. Now researchers at Brandeis University in Waltham, Mass., have created a butter substitute that increases HDL (“good”) cholesterol and lowers bad cholesterol.

Increasing the HDL level and the HDL/LDL ratio in human serum with fat blends was the goal reached in 1995 by department of biology professor K.C. Hayes, Ph.D., professor Daniel Perlman, Ph.D., and Kalyana Sundram, Ph.D., director of nutrition for palm oil research at the Malaysian Palm Oil Board in Kuala Lumpur.

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“ *The special blend is composed of cholesterol-free fats, with balanced proportions of saturated fats and polyunsaturated fats.* ”

The mixture provides natural hardness or plasticity that makes it as spreadable and flexible as shortening, which is difficult to achieve with most natural fats.

These blends have been incorporated into a number of heart-healthy foods, such as Smart Balance spreads and popcorn. Clinical trials have shown the Smart Balance® formulas are effective in improving cholesterol ratios. Because of its excellent flavor (three consecutive Best Taste Awards from the American Culinary Institute), natural stability when heated, and melting characteristics, Smart Balance products have gained widespread acceptance by consumers as a butter substitute. Sales have increased 20 to 40 percent annually since it was introduced to the marketplace a decade ago.

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