Red palm oil is gaining popularity as a cooking fat, however, most Americans have been routinely consuming its highly refined counterpart, “palm oil”, for years. Currently, palm oil is found in approximately 50% of products available in the supermarket (1). As a cheap, shelf-stable fat, this oil is utilized in an increasing number of packaged food products. With trans-fats undergoing intense scrutiny from consumers and government agencies alike, manufacturers of cookies, cakes and other snack foods have found a cheap alternative in trans-fat-free palm oil.

Red palm oil is a tropical oil produced from the fruit or flesh of oil palm trees grown mostly in Southeast Asia. Red palm oil is not to be confused with palm kernel oil, which is made from the kernel or seed of the palm fruit and has a completely different nutritional profile. The virgin, unrefined palm oil is the type being touted as a “superfood” because it retains a bright red color and contains a high amount of vitamins and antioxidants (2). However, the palm oil found in processed food products has been refined, bleached and deodorized, and therefore loses most of its health-promoting properties (3).

The impressive nutrient profile of red palm oil contributes to its reputation as a “healthy” oil. Red palm oil retains an orange-red pigment due to its impressively high carotenoid content. Beta-carotene, the main carotenoid found in red palm oil, is more abundant in red palm oil than even carrots or tomatoes (3,4). Beta-Carotene is considered a ‘provitamin A,’ meaning it is converted to Vitamin A in the body, acting as a potent antioxidant (5). In addition to provitamin A, red palm oil also contains a high amount of vitamin E – another fat-soluble vitamin with antioxidant capabilities (6). Consumption of these synergistic antioxidants, beta-carotene and Vitamin E, has been linked to reduced oxidative stress in the heart, decreased blood pressure, and reduced cholesterol production in the liver (7,8).

Similar to other tropical oils, the fatty acid composition of red palm oil is highly saturated (about 50% saturated fatty acids) which makes it a fairly heat resistant, stable cooking fat (9). However, the composition of red palm oil is unique in its fatty acid positioning which, in combination with its high antioxidant content, contributes to its potential ability to reduce LDL cholesterol and elevate HDL cholesterol (10).

Despite potential health benefits, all palm oil production has come under scrutiny in recent years. The method and volume in which it is harvested raises many questions about its sustainability and environmental impact (11, 12). The amount of food products utilizing palm oil has skyrocketed, causing the demand to soar in recent years with square footage devoted to palm-oil production increasing by 43% since 1990 (13). The RSPO (Roundtable on Sustainable Palm Oil) and Green Label certifications exist to vouch for sustainable production, but only 4% of total palm oil produced is carries this distinction (13).
While red palm oil appears to have a favorable nutrient profile and potential for healthy culinary applications, the nutrients and benefits it provides can be found in other, potentially more sustainable food options. Adequate beta-carotene can be found in foods like sweet potatoes, dark leafy greens and carrots, and cooking fats like coconut or avocado oil can be used for higher temperature applications. Like all fats and oils though, higher nutrient density can be obtained from eating a whole food versus its extracted oil.