Brazil has considerable territorial peculiarities and plant species diversities, sometimes from the same botanical family. The fruits can exhibit significant differences in properties of the oils extracted. As example can be cited Brazil nut (Bertholletia excelsa), Sapucaia nuts (Lecythis pisonis camb.), Amazonas tucuma (Astrocaryum aculeatum Meyer), Pará tucuma (Astrocaryum vulgare Mart.), Chicha (Sterculia striata), Peanut (Arachis hypogaea L.) among other. The raw materials of great relevance, as oils from seed and pulp, have been widely investigated due to its lipid content and potential application, fatty acid profile, and bioactive compounds. The extraction process can interfere in some properties of the obtained oils, as quantity and quality of their unsaturation profile, directly influencing the nutritional quality of these oil, for example, with regards to quantitatively unsaturated fatty acids, as well as total carotenes. Thermal analysis has been used in studies on thermal decomposition, moisture determination, volatile compounds, thermal oxidation, reaction kinetics, crystallization, phase diagrams, specific heat determination, vitreous transition determination, storage time determination and it can be useful to characterize the properties of the oils and fat foods. Oils are responsible for performing varied and important functions in the body, such as providing calories, essential fatty acids and fat soluble vitamins, and are considered very important among the ingredients and the sensory aspects of the functional properties of the food. The final characteristics of processed fat products depends on the physical and chemical properties of oils and fats present in their formulation.

Biography
Suzana Caetano da Silva Lannes is working as Associate Professor at Pharmaceutical Sciences School at University of Sao Paulo. She is the President of Brazilian Society of Food Science and Technology-sbCTA, and Vice President of Brazilian Association of Rheology. She has published papers in reputed journals, book chapters, and has been serving as Editor in Chief of Food Science and Technology-CTA Journal. She develops research works in the Food Science and Technology area, on the following subjects: rheology, physics of foods, development of special and nutritional food formulations and study of fats and some fat foods.

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