# 7.2 - LIPIDS

In the Arctic region of the northern hemisphere is a group of people that make up the Inuit culture. The Inuit people have tragically adopted much of the American diet that we indulge in (fast food, sugary drinks, processed meals, etc.). As a result, the Inuit incidence of diabetes and cardiovascular disease is rising dramatically. Inuit natives who adhere to the traditional diet of marine mammals, fish, with some berries and greens are not demonstrating the startling trend of metabolic disease.

Some call this the Inuit Paradox. The paradox refers to the fact that traditional Inuit diets consist of large amounts of fat. Whale fat, seal fat, caribou fat, and other small animal fat is regularly consumed as a staple. In fact, the daily fat consumption is nearly two times the recommended daily allowance published by the health and nutrition experts in our government. So, how come the Inuit people can exist on double the recommended dose of fat intake and decrease their incidence of cardiovascular disease and diabetes? This would seem to be a paradox.

There must be more to the unhealthy American diet than the amount of fat consumed. It appears that the type of fat consumed is at least as important as the quantity. Have you heard people talk about saturated and unsaturated fat, or vegetable oil and animal fat? Have you heard anything about omega 3 oils and omega 6 oils? What about Trans fats and cholesterol?  It seems that not all fat and oils are the same. Perhaps the types, mixtures and ratios of fat and oils found in the traditional Inuit diet can help explain the health benefits enjoyed by traditional Inuit natives. Much is being printed these days about the types of fat we eat and how to choose them wisely.

Science is taking a closer look at other traditional diets as well. Have you heard the hype about the heart protective effects of the Mediterranean diet? Some feel that the types of oils and fats found in this part of the world may have heart protective effects. You will likely hear and read more on the topics of fats and oils in years to come. In order for you to be a literate consumer of this information, it will be important that you know your fats. This section will teach about the different types of dietary lipids. Lipid molecules give us fats, oils, waxes, cholesterol, cell membranes, some pigments, some vitamins and many other important compounds. Among the many types of lipids, the terms “fat” and “oil” are probably the most familiar. These are the terms that we use to describe the storage form of lipids in plants and animals. Fats and oils are a necessary part of our nutrition.  **Fats** are generally solid at room temperature while **Oils** are a liquid. The property of oils makes them not associate will with water, this is why we often say that “oil and water do not mix”.

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