

Frying Medium Phases

Consistency and quality of the frying medium (FM) is a key factor in maintaining that frying practices ensures optimum health benefits.

Traditional frying methods generally consist of a routine where all the frying medium is replaced at specified intervals. This method causes an inconsistency with the frying medium.

The life of the oil consists of **three phases**. During the first Phase, the water in the product evaporates slowly and remains on the surface for longer creating an overcooked and slushy product.

During the second Phase the frying medium is at its optimum. The ideal volume of water is extracted, and the product seals sufficiently to cook within by its own vapour.

During the last phase the frying medium is breaking down, resulting in off flavours, unhealthy by-products and a darker colour that makes food appear overcooked.

Frying medium in phase 1 or 3 is detrimental to the customer's health as it will have a high fat content.

Premos Method

Premo oil management systems uses a method of oil rotation to ensure the oil is at second phase quality all the time.

For this rotation system to work we need these factors:

A **thermostat** that has been tested as reliable. Over heated frying medium will cause it to break down too rapidly.

Daily filtration. Fine debris must be removed from the vat daily before the FM cools over night. (The marinating of the fine particles over night that breaks down the FM rapidly)

A form of **testing** that can show when the FM is breaking down and needs to be rotated. Ideally a testo-265 sensor which measure Total Polar Material (TMP) or 3M paper strips which test for levels of Free Fatty Acids.

Ideally we recommend only the use of **high grade Fats or Oils**. Using low grade or cheaper FM is false economy as low grades oils will not last as long.

Extending the life of your FM is simple but varies according to volumes fried and the product being cooked. The method involves: Single Vat and Multiple Vat operations.

Different Operations

Single Vat Operations

Keep your FM topped up with new medium.

Drop 20% of your frying medium on a regularity depending on volumes.

These methods will extend the life of your FM and give you second phase consistency all the time. More importantly you will use less FM resulting in significant savings.

Multi Vat Operations

Multi vat operations have many variable factors, but in general:

Vat 1 is for initial frying of the battered products. This vat has the newer FM and is the only vat to be topped up with new FM.

Vat 2 is for chips and finishing off battered products. And will be topped up from vat one daily as FM goes out on the product.

The regularity in which the oil is dumped depends on the volume of product. If this vat is starting to break down some FM needs to be dumped (we recommend trailing 20%) then replace with FM from vat one. Test with your 3M tester.

Vat 3 is for additional chips and/or crumbed products. Crumbed products cause a quicker break down of FM. If you crumb a lot of product you may wish to filter twice a day. Follow dumping procedures as outlined with vat 2. Have a separate vat for Chickens, sausages and seasoned products as juices from these products cause the FM to breakdown faster. This vat will need to be dumped more regularly and can be topped up from vat one or two to give it the second phase quality.