

Virgin coconut oil (VCO) contains high amount of lauric acid which can convert into a fatty acid derivative, called monolaurin. Monolaurin is the same substance found naturally in mother's milk and is also believed to help the immunity creation and be antibiotic substance. So, the consumer pays more attention in VCO as a supplementary food. However the majority of VCO products are in the form of liquid and VCO has its own characteristic and distinctive odor. These cause the limitation in utilization as food products. Therefore to transform VCO into the powder form would be necessary and beneficial to the consumer. The aim of this study was to apply the encapsulation technique to develop the spray dried VCO powder and to investigate the effects of processing parameters including weight ratio of maltodextrin: VCO at 3:1, 2:1, 1:1, drying air temperature at 170 -230 °C, % emulsion concentration at 30 – 50 %w/w. The spray dried powder samples were analyzed for moisture content, %powder yield, %encapsulated oil, %total oil, %free fatty acid and water activity. The result showed that the maximum percentage of encapsulated oil of 74.2% occurred at 45% emulsion concentration, weight ratio of maltodextrin: VCO at 3:1 and drying air temperature at 230°C