

## ESCOLAR

In recent years, fish known as escolar have been imported and sold at local fish markets. Public health officials have received complaints of unpleasant side effects associated with the consumption of escolar fish.



### What is Escolar?

Escolar is a dark brown oily fish that is native to tropical and temperate seas worldwide. Escolar is a member of the *Gempylidae* (snake mackerel) family. Both species, *Lepidocybium flavobrunneum* and *Ruvettus pretiosus* may cause symptoms. These fish may also be marketed as oilfish, gemfish or rudderfish.

### Market Labeling Problems.

Escolar can be improperly called butterfish and rudderfish. True butterfish (scatophagus species) have not been associated with symptoms. Rudderfish (*Centrolophus niger* and *Tubbia sp.*) contain high levels of oil, but not the same type as escolar fish. Local fish called sablefish or black cod (*Anoplopoma fimbria*) are also sometimes labeled as butterfish - these fish will not cause escolar-like symptoms. Escolar fish have also been mislabeled as Sea Bass.

### References:

1. CDA 2002;26(3):436-445.
2. Photo source: <http://www.cfsan.fda.gov/~frf/ecft002w.jpg>

### What are the Symptoms?

Individuals who have eaten escolar fish can experience a rapid onset of diarrhea (median onset of 2.5 hours, ranging from 1 to 90 hours), which is often oily and orange/yellow in colour. The diarrhea is often mild, but some cases have reported more severe diarrhea and symptoms that include abdominal discomfort, nausea and vomiting.

### What Causes the Symptoms?

Fish of the *Gempylidae* family contain a strong purgative oil called gempylotoxin. These fish contain 20% (by weight) of indigestible wax ester oil - this causes rapid diarrhea in susceptible individuals. The symptoms are thought to be associated with the high oil content of the fish rather than from a harmful toxin.

### Can Escolar be Imported?

Yes. The escolar is permitted to be imported provided it meets general regulatory requirements. All imported escolar fish must be labeled as Escolar in English and/or French, or any other language used on the label according to CFIA regulations.

*For further information, please contact your Fish Safety Officer at 604.707.2458 or your local Health Authority.*

Updated: November 2007