

You are what you eat so be careful

Public Health Office

Four weeks were spent working with veterinary and animal care personnel at Sea World, San Diego, California, in the area of marine mammal medicine. Emphasis was placed on anatomy, medicine, and parasitology.

It was interesting to note the great numbers of intestinal parasites (worms) in the beached sea lions and seals. Organisms from the genus *Parafilaroides* were found in the lungs, while the genus *Anisakis* and *Diphyllobothrium*, subgenus *Contracaecum* and phylum *Acanthacephala* were represented in the digestive tract.

The worms in the lungs of these animals were responsible for lung abscesses and pneumonia. Those in the gut had caused blood loss, pernicious anemia, ulcerations, perforations, granulomatous lesions and death.

This is all very interesting, but what does it have to do with the residents of the North Slope Borough? I will try to put it in a much closer perspective.

Think for a moment about the primary diet of pinnipeds; i.e., seals, sea lions, etc. Raw fish composes most of their diet. The worms found in the lungs and gut of these animals come from the fish that they eat.

All the parasites I have listed have representatives that affect man. Eating raw or poorly cooked fish is not an uncommon practice by individuals in Alaska, thereby exposing those individuals to infection.

Very little work has been done to determine how susceptible man is to infection or to the extent of the damage caused in man by these parasites. Evidence from other ani-

mals that eat raw fish would lead one to believe that man can easily be infected and that damage by these parasites can be considerable.

Almost everyone is aware of trichinosis, its effects and how to avoid it. Parasites from fish are similar in that they may

cause considerable damage but can be avoided by following simple precautions.

DO NOT eat raw or poorly cooked fish. Fish should be cooked thoroughly to 140 degrees F. or higher for 5 minutes or longer or frozen to a

minus 4 F. or colder for at least 60 hours (2½ days). Ice cellars remain at plus 18 degrees F. and therefore are not adequately cold enough to kill these parasites.

The Animal Clinic in Barrow has representative samples

of each of the parasites listed. They range in size from less than a millimeter to over 43 feet long. They were taken from a 40-pound California sea lion.

Who knows, you may be providing a home for some of these parasites. Happy Fishing!

