

A water buffalo is shown in profile, facing right. Its body is covered in a red, textured overlay that resembles the appearance of sarcocysts, which are parasitic structures. The buffalo has a dark head and neck, and its legs are also dark. The background is plain white.

**PLEASE
PROTECT ME FROM
SARCOCYSTS**

HOW TO PREVENT SARCOCYSTS IN BUFFALO MEAT?

- ◆ Do not offer raw or partially cooked buffalo meat, offals & meat products to dogs, cats, etc.

- ◆ Freezing and thawing of buffalo meat and cooking of buffalo meat at $\geq 70^{\circ}\text{C}$ for 15 minutes kills Sarcocysts



Do not allow contamination of feed, fodder and drinking water meant for buffaloes with stools of dogs, cats etc.

SARCOCYSTOSIS IN BUFFALOES

India possesses about 105 million buffaloes, almost half of world buffalo population. During 2013-14, India exported 1.45 Million Tonnes of buffalo meat earning Rs. 26,458 crores. Parasitic Sarcocysts present in buffalo meat is reducing the value of buffalo meat (mainly due to aesthetic appearance) in the export market. Sarcocystosis is a protozoal disease completing sexual life cycle in dog, cat etc., and asexual life cycle in buffaloes, cattle etc. Few important Sarcocysts present in buffalo meat are given below.

Sarcocyst species

S. levinei
S. fusiformis

Intermediate host (Sarcocysts in muscles)

Buffalo
Buffalo

Definite host (Sporocysts in feces)

Dog
Cat

Dogs, Cats etc: Due to ingestion of raw or partially cooked buffalo meat, offals etc, bradyzoites present in Sarcocysts are released in intestines. They enter into intestinal epithelium and damage it causing intestinal disturbances like diarrhoea, dysentery etc.

Buffaloes: Due to ingestion of fodder contaminated with feces of dogs, cats etc, sporozoites present in sporocysts are released into intestines. They enter into intestinal epithelium and reach all voluntary muscles of body. Thus cucumber seed shaped sarcocysts are formed and lodged in muscles.

Zoonoses: Eating of *S. hominis* present in partially cooked cattle meat may cause intestinal disturbances in humans. It is still not understood whether the same *S. hominis* of cattle nature is also present in buffalo meat which is causing intestinal disturbances in humans due to eating of partially cooked buffalo meat.



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