

### ***Where does it come from?***

Bovine serum is a by-product of the meat industry. Bovine blood may be taken at the time of slaughter, from adult cattle, calves, very young calves or (when cows that are slaughtered are subsequently found to be pregnant) from bovine fetuses. It is also obtained from what are called "donor" animals, which give blood more than once.

Blood is available from bovine fetuses only because a proportion of female animals that are slaughtered for meat for human consumption are found (often unexpectedly) to be pregnant. Blood is available from very young calves because calves, especially males from dairy breeds, are often slaughtered soon, but not necessarily immediately, after birth because raising them will not be economically beneficial. Older animals are, of course, slaughtered for meat.

Only donor cattle are raised for the purpose of blood donation. Donor cattle are invariably kept in specialized, controlled herds. Blood is taken from these animals in a very similar way to that used for human blood donation.

Irrespective of whether blood is taken at slaughter or from donors, the age of the animal is an important consideration because it impacts the characteristics of the serum.

Bovine serum is categorised according to the age of the animal from which the blood was collected as follows:

- **"Fetal bovine serum"** comes from fetuses
- **"Newborn calf serum"** comes from calves less than three weeks old
- **"Calf serum"** comes from calves aged between three weeks and 12 months
- **"Adult bovine serum"** comes from cattle older than 12 months

Serum processed from donor blood is termed **"donor bovine serum"**. Donor animals can be up to three years old.